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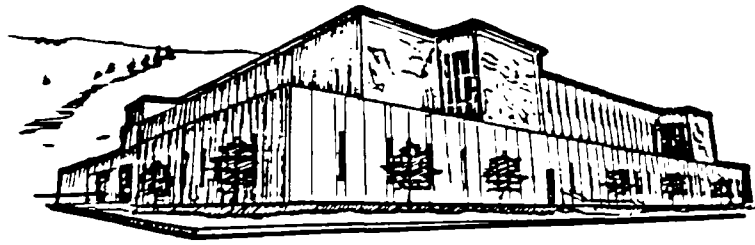
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University of
Montana

REGULATING MINING IN MONTANA:
STEALING THE COMMON FROM THE GOOSE

by

Rasim Babameto

B.S., York College, City University of New York, 1976.

Presented in partial fulfillment of the requirements

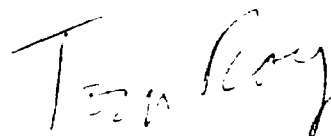
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Masters of Science

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1992

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The next passage in my journey is a love affair. I am In love with Montana. For other states I have admiration, respect, recognition, even some affection, but with Montana it is love, and it's difficult to analyze love when you're in it...It seems to me that Montana is a great splash of grandeur. The land is rich with grass, and color, and the mountains are the kind I would create if mountains were ever put on my agenda. Montana seems to me to be what a small boy would think Texas is like from hearing Texans...Again my attitude may be informed by love...But I see that as usual love is inarticulate. Montana has a spell on me. It is grandeur and warmth.

John Steinbeck

From Travels With Charlie

Acknowledgments

The act of producing this paper, I can honestly say, has been the most difficult task of my life. I know that I would never have attempted it if it were not for Jim Dwyer and his relentless and humorous belief in me. He was a dear friend and mentor. I only wish you were here to celebrate with me. I miss you Jim - to the Liffy!

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Last but not least I am most grateful to my parents, Isak and Mejmenet for their love, support, cross-continent perspective and their rare breed of patients. I am dedicating this paper to you both - I love you both dearly!

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SECTION I

Introduction

Montana's gold and other metal production has surged in recent years as a result of new technologies and higher gold prices. Along with this new growth in mining activity, citizens and environmental groups are raising concerns about the ability of legislation to protect the environment from the harmful consequences associated with mining.

The sad legacy of unregulated mining in Montana is common knowledge. In reaction to Montana's history of abusive mining practices and the subsequent environmental degradation, laws were enacted to regulate the effects of mining - to lessen the impacts to the surrounding environment and, ultimately, the impacts to our own health, safety and welfare.

Even so, today, mining in Montana is fraught with conflict. The source of this conflict is based on legal interpretations of rights: the right to mine, as stipulated by the Mining Law of 1872; the right to a clean and healthy environment, as ordained by the Montana State Constitution;

and a host of federal and state land use laws that imply a right to a clean and healthy environment.

This paper will consider the ecological and regulatory implications of this new and rapid growth in the gold mining industry. The Montana State Supreme Court, in light of the Montana Constitution's proclamations concerning the right to a clean and healthy environment and the reclamation of disturbed lands, has failed to uphold the supplementary and substantive intent of the Montana Environmental Policy Act (MEPA) fashioned after the National Environmental Policy Act (NEPA)¹. State regulatory agencies have also failed to require strict application of recognized substantive legislation and regulations like the non-degradation of water quality section of the Clean Water Act (CWA). An examination of specific portions of NEPA and MEPA, the Montana State Constitution, as well as the associated case law, demonstrates that the intent of laws of that generation have been weakened by: (1) poor judicial interpretation; (2) a lack of explicit substantive language and; (3) inadequate regulatory agency response to and application of the laws and regulations at their disposal to prevent or mitigate pollution caused by mining development.

¹The National Environmental Policy Act of 1969. 42 U.S.C. ss4321 et. seq., 83 Stat. 852, Pub. L. 91-190. The purposes of this Act are: to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and, to establish a Council on Environmental Quality.

Some federal and state agencies have been slow to apply NEPA to hardrock mineral disposition. Hence, the courts have had to determine "the extent to which NEPA alters or amends mineral disposition schemes."² If it were left to the land management agencies (State, BLM, FS) they would "typically oppose application of this inconvenient law to federal mineral allocation."³ Some agencies believed NEPA did not apply to them; they were wrong.⁴

This paper will:

- Demonstrate that Environmental Laws meant to protect and preserve natural resources, such as water, from the effects of mining, have: (1) not been adequately applied, and; (2) have been narrowly construed by Montana State agencies.

- Establish that the Montana State Supreme Court has helped to lessen the impact of environmental laws like the Montana Environmental Policy Act (MEPA) by poor judicial review.

- Illustrate a need for more substantive and explicit language in the laws applicable to mining in Montana.

- Confirm a need for a more consistent, progressive, and aggressive policy of mining regulation.

²See G. Coggins, J. Van Dyke, "NEPA And Private Rights In Public Mineral Resources: The Fee Complex," Environmental Law, Vol. 20:649, (1990), p. 661.

³Id. at 661.

⁴See S. Harrison, "Disposition Of The Mineral Estate On United States Public Lands: A Historical Perspective." The Public Land Law Review, Vol. 10, (1989), p. 131.

The disposition of mineral interests in the United States public lands is governed by a confused system of overlapping and conflicting rights and jurisdictions. Federal management of the public mineral estate reflects dichotomous policies aimed at exploitation on the one hand, and conservation on the other.

-Present a case for revamping the "right to mine" doctrine of the 1872 Mining Law in favor of a right to say "no" to mining when the environmental consequences outweigh the benefits of mining.

Section one will use examples from mining's unregulated past to illuminate today's problems, and the need for adequately regulated mining. Section two will address the role of government and law. Analysis of certain dictates of the 1872 Mining Law, like the fee simple private property right potentially granted by this law, is offered with regards to the mining of public lands. In this same section, I will discuss specific environmental mandates and case law to demonstrate that in certain instances laws have been weakened by poor judicial review. And where favorable decisions have been handed down by the courts the regulatory agencies have been reluctant to pursue their full governing potential of mining on public lands. Section three will address the major increase in mining occurring in the state, while indicating a need for concern with the technologies (especially heap leaching) fueling the present gold rush. Section four presents citizen group dissatisfaction with the current regulatory process and presents their demands for better mining regulation. Section five will state conclusions and recommendations.

The emergence of the United States as a world power was made possible, in part, by the leveraging of forces perceived to be America; its land, its natural resources, its laws, its people, and the very visions that invoked America. This domestication and co-option of America's wildlands, however, did not take place without substantial cost. While many Euro-Americans directed their energies toward the wealth and power that the resource-rich lands of North America held, other inhabitants of this same land were gaining a new perspective from their well-known surroundings and its new occupants. Certain native people had a saying "...never drink downstream from a white man."⁸ This judgment made good sense.

The Montana Scene

Montana has a litany of problems associated with both unregulated and regulated mining activities of Euro-Americans. According to a report written by Chen Northern Inc., a geo-technical firm, "Non-coal mining methods have created some of the most severe

given away from the United States' public lands to anyone who could find them. It is still the law as of this writing in 1993. Note: the federal government did not formulate a clear policy concerning disposition of mineral lands until 1866. Before the 1866 enactment the U.S Government indicated a desire to retain ownership of the mineral estate. However, by 1866, when the federal government decided mineral lands would be "free and open", many mining districts and mining communities existed already.

⁸Quotation from Woody Kipp, "I Am Not A Racist" Montana Kaimin, (April 6, 1990), p.2.

Last week's column alluded to a saying the early-reservation Blackfeet developed after having watched the white people do their thing on the Blackfeet aboriginal homeland. The natives noticed that the white people put various concoctions in the lakes, springs and rivers that gave them a foul taste. They developed a saying: Never drink downstream from a white man."

health and safety hazards in Montana. Health hazards caused by ingestion, inhalation or absorption of toxic metallic mine waste have impacted...Montana communities." Thousands of inactive abandoned mining sites, where owners have no remaining reclamation responsibility, exist as well.⁹

Chen Northern's report identified in Montana:

- 20,000 inactive and abandoned non-coal mines
- 153,000 acres of land affected
- 19,751 mine sites
- 1,183 mill sites
- 1,057 smelters
- 1,118 miles of polluted water
- 14,038 acres of mine dumps
- 20,862 acres of disturbed land (from mining)

Air quality deterioration¹⁰, groundwater¹¹ and surface water contamination¹², wildlife habitat destruction¹³, human health¹⁴, worker

⁹See B. Lombardi, Missoulian: "Study digs up old-mine worries-" (Nov 7, 1991), p. 3.

¹⁰The East Helena smelter has never met air quality standards for lead emissions. This same site is one of several EPA Superfund hazardous-waste sites in the state of Montana.

See M. Dennison, Missoulian, "East Helena smelter among state's top polluters, Wildlife Federation reports," (Aug. 11, 1989), p. B1.

¹¹See M. Popoff, "A case study of the Hydrogeology and Groundwater Contamination of Milltown Valley, Montana, Unpublished Masters Thesis, University of Montana, (1985).

¹²See J. Moore, and S. Luoma, "Mining Hazardous Waste," Science & Technology (1990), pp. 1278-1285, and J. Stromnes, Missoulian, "Clark Fork fish kill: Old toxins wipe out trout along 18 miles of river" (1989) p.?

¹³See interview with Interagency Grizzly Bear Study Team (IGBST) Wildlife Biologist, Dan Rienhart, in Gene Bernosfsky's, World Wide Film Expedition, "Undermining Yellowstone", Missoula, Montana, (1992), 21 minute Video, G. Laycock, Audubon, "Going For The Gold," (July 1989), pp. 78, and Moore, and Luoma, pp. 1278-1285, Effects on Ecosystem.

¹⁴Moore and Luoma, supra note 12 at 1278-1285, Effects on Human Health.

safety¹⁵, and compensation issues, land reclamation and rehabilitation¹⁶, aesthetics, colonial treatment of Montana and its people by outside investors¹⁷, are some of the documented "spoils" of mining ventures inside the borders of Montana.

Clark Fork Example

Toxic waste from past mining operations threatens local and regional environments. An extreme, but not unique, example of the effects of mining under the 1872 Mining Law in Montana is the present condition of the upper Clark Fork River drainage. The Upper Clark Fork is the largest Superfund site¹⁸ in the United States, the result of 125 years

¹⁵See J. Stromnes, Missoulian, "Mine workers vote on union this week," (May 21, 1989), p. 6, Toole, supra note 7, _____. "Rape of the Great Plains," Boston, MA, (1976), and _____. "Twentieth Century Montana, A State of Extremes," Norman OK, University of Oklahoma Press, (1972).

¹⁶See Moore and Luoma, supra note 12 at 1278-1285, Strategies for Remediation, and B. Anez, Missoulian, "Mining Cleanup: Governor seeks \$4 million allocation to help for reclamation costs." (Dec. 2, 1990), p. B2.

¹⁷See R. Myers, Western WildLands, "Boom and Bust: Montana's Legacy of High Hopes and Lost Dreams," Montana and Toole, supra notes 7 and 15.

¹⁸Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Public Law number: PL 96-510, U.S. Code citation: 42 USC 9601 et Seq., (Dec. 11, 1980) Regulations at: 40 CFR 300, Federal agency with jurisdiction: Environmental Protection Agency (EPA). The act, commonly called the Superfund Law, requires cleanup of releases of hazardous substances in air, water, and groundwater and on land. Both new spills and leaking or abandoned dump sites are covered. Releases of reportable quantities of a substance listed as hazardous must be immediately reported to the National Response Center.

CERCLA also establishes a trust fund to pay for cleaning up hazardous substance in the environment and gives EPA authority to collect the cost of cleanup from the parties responsible for the contamination.

Money for cleanups, authorized under the law comes from fines and other penalties collected by the government, from a tax imposed on chemicals and petrochemical feedstocks, and from the U.S. Treasury. A separate fund established under the law is authorized to collect taxes imposed on active hazardous waste disposal sites to finance monitoring of sites after they close.

of copper and silver mining and smelting activities associated with the Butte-Anaconda mining district.

The Clark Fork Complex stretches miles from Butte to Missoula and encompasses contaminated lands covering an area one-fifth the size of Rhode Island.¹⁹ The contaminants found in the upper Clark Fork basin are the product of the mining, milling, and smelting processes of some 300 million cubic meters of ore from the Berkeley Pit and tens of million cubic meters of rock from underground mining.²⁰ The process of mining and extracting metals from rock is inherently a toxic waste producing procedure.²¹

Tailings ponds along the Clark Fork River cover at least 35 km² and hold more than 200 million cubic meters of tailings and smelter waste;²² 9,000 metric tons (MT) arsenic, 200 MT cadmium, 90,000 MT copper, 20,000 MT lead, 200 MT silver, and 50,000 MT zinc could be present in the ponds.²³

Population studies of fish (numbers of fish per mile) and the diversity of aquatic life that inhabit a river indicate a river's well-being.

¹⁹See Moore and Luoma, *supra* note 12 at 1278-1285.

²⁰*Id.* at 1280.

²¹*Id.* at 1281.

The variety of wastes produced during mining, milling, and smelting, and deposited near their origin are sources of primary contaminants. As these contaminants are transported away from the site by rivers or through the atmosphere they generate secondary contamination in soils, ground water, rivers, and air, deposits of these by products can be distributed over vast areas and, if remobilized, can result in tertiary contamination. Interaction among these categories of wastes results in complex problems in geochemistry, hydrology, ecology, and epidemiology.

²²*Id.* at 1281.

²³*Id.* at 1281.

Fish populations in the Clark Fork River ecosystem are typical of those affected by chronic exposure to high concentrations of heavy metals.

Chronic exposures to heavy metal contamination extend at least 236 miles downstream from Butte, while acute episodic events occur in the upper 62 miles of river. More considerable fish kills occur in the upper 6 to 12 miles of river.²⁴ Studies of health and mortality records of areas in close proximity to mining operations can and have revealed alarming human health trends too.

Metals have found their way into groundwater drinking supplies at levels well above the drinking water standards²⁵ set by the Environmental Protection Agency under the Safe Drinking Water Act. In 1981, high levels of arsenic were found in the drinking water of Milltown, a town 165 river miles downstream of Butte near Missoula. Twelve of 19 wells studied were over the drinking water standard for arsenic (0.05 milligrams per liter). One of Milltown's water wells contained 0.825 mg/l²⁶ of arsenic, 16 times greater than the 0.05 mg/l standard set by the EPA. It was calculated that two pounds of arsenic moved through the area of one well per day. At the time the source of this contaminant was unknown.

Groundwater investigations since 1981 have determined the source of arsenic in Milltown's contaminated wells to be the 6.5 million cubic yards of sediments and associated contaminants that

²⁴Id. at 1283.

²⁵The EPA drinking water standard for arsenic is 0.05 m/l.

²⁶See Popoff, *supra* note 11 at 73.

accumulated behind the Milltown dam on the Clark Fork. In 1981 the EPA's Superfund program kicked in with money for studies to delineate the extent and source of heavy metal contamination in the area and for emergency clean up. The Clark Fork River drainage, home to what was once the largest copper mine in the world, thus became the largest superfund site in America.

In the early days of Euro-American history there were no legal, legislative, or regulatory remedies in place to protect people and the land from the pollution of mining and other development activities. What few laws existed generally defined the proprietary and administrative "rules of the game", as has been the case with the 1872 Mining Law.

Today, however, laws and rules intended to protect all of Montana's inhabitants from the external costs²⁷ of resource development do exist. However, even though environmental and mining laws co-exist, they are not weighted equally. In the legal hierarchy of land use law, metal mining on open public lands dominates. Mining law with respect to environmental law has been interpreted in such a way as to limit the degree to which protective

²⁷An external cost, or neighborhood effect, exists when a production or consumption activity induces a direct loss of utility, or an increase in production cost, that does not enter the decision calculus of the controller of the activity. e.g. The Grand Coulee Dam cost the NW millions of salmon. In today's dollars one could calculate the cost of one kilowatt hour from the Columbia river in terms of lost salmon fisheries, or in the case of gold mining, what is really the total cost of a gold wedding ring when 100 tons of rock is moved for .5 ounces of gold and leaves behind a constant bleeding source of heavy metal contaminants.

environmental legislation can be applied. Ultimately the mining for metals from public lands open to mining precludes the other possible uses of this same land, or so it seems.²⁸

²⁸See Harrison, *supra* note 4 at 131.

The disposition of mineral interests in the United States public lands is governed by a confused system of overlapping and conflicting rights and jurisdictions. Federal management of the public mineral estate reflects dichotomous policies aimed at exploitation on the one hand, and conservation on the other.

SECTION II

THE ROLE OF GOVERNMENT IN REGULATING MINING

The 1872 Mining Law

Mining and mining law existed in North America well before Congress passed the General Mining Act in 1872. Before California became a state, mining there was governed by a complex maze of local mining district rules and customs gleaned from Mexican, Spanish and Northern European mining codes.²⁹ Earlier mining standards were comprehensive and dealt with such matters as civil rights and

²⁹The roots of American mining law derive primarily from the laws of Spain, as adopted by Mexico, and from English common law. England and Spain early evolved differing concepts as to the severability of minerals from the surface estate. The chief distinction between the systems lay in the extent of the sovereign's assertion of ownership of mines; while Spanish sovereigns traditionally claimed property in minerals as an incident of sovereignty, English sovereigns laid claim only to mine of gold and silver and regarded these as a personal, severable prerogative...Complicating influence arises from the diverse foundations of American mining law and American property concepts in minerals, primarily Spanish law and English common law. Because of the disparate laws of the original colonial powers, different land acquisitions piecing together the United States often carried different consequences for mineral ownership.

For a more detailed account of the Roots of American Mining Law, see Harrison, *supra* note 4, at 131-156, P. Gates, *History Of Public Land Law Development* (1968), and L. Mall, *Public Land And Mining Law*, 3rd ed., (1981).

remedies, crimes and punishment, and rules for establishing possession of a mining claim. Although common mining codes may have varied from district to district, two features were generally standard: discovery of a valuable mineral was the basis for the possessor's title and development was required to maintain possession. But it was not until 1866 that the United States began to establish a standard mineral development policy for the nation as a whole.³⁰

In 1866 the United States Congress resolved that all mineral lands should be free and open to exploration, the customs of the local mining districts and rights acquired should be recognized by the federal government, and title to claims would be obtained from the government. Congress then reaffirmed, broadened and strengthened its position on a national mineral development policy in 1872 with an act "to promote the development of the mining resources of the United States."³¹

The 1872 law states that "all mineral deposits in land belonging to the United States are free and open to exploration and the lands in

³⁰See Harrison *supra* note 4 at 132.

[P]roperty interests in public lands historically were distributed through two different lines of enactments having distinct and sometimes conflicting goals. [first] The initial thrust of public land disposition aimed primarily at distributing the surface estate for agriculture and commerce, while generally reserving vaguely-defined 'mineral lands' to the government. The second line of enactments aimed specifically at disposing of the public mineral estate to private parties. These enactments had an incidental (but not insignificant) effect on the surface estate, insofar as the mineral properties were patentable, and insofar as the assertion of the mineral right conflicted with the rights of the possessor of the surface.

³¹See General Mining Act of 1872, 30 U.S.C. (1982).

which they are found are open to occupation and purchase." This law gives anyone who discovers a "valuable mineral deposit"³² on open public lands the explicit legal "right" to mine it and a full "fee simple" possessory interest.³³ Patented³⁴ mining claims are private property holdings in the fullest sense of the term, protected by the Fifth Amendment to the United States Constitution. Developers must complete statutorily and administratively defined processes before they may assume full fee title to lands encompassing a mineral deposit.³⁵

³²*United States v. Coleman*, 390 U.S. 599 (1968): "valuable" in this case is understood to mean that a prudent person reasonably believes a profitable mine can be developed on the claim.

³³According to Harrison there are at least five common types of mineral property interests:

Possessory Interests:

(1) Fee simple interests Under English common law, and American law (based on English common law theory), the right to minerals has long been recognized as a material and tangible interest in the land that can pass by inheritance or grant. With the exception of sovereign claims, at common law the owner of the surface owns fee simple title to the minerals. The fee owner can impart the mineral estate separately from the surface.

(2) Mineral leases A lease is seen as a possessory interest defined by the terms of the lease agreement.

Quasi-possessory interests:

(3) Easements and profits granting access to and profits from another's land.

Non-Possessory Rights

(4) Royalties entitles the holder to a portion of the production but imparts none of the "usual attributes of ownership.

(5) Licenses grants permission to enter another's land to accomplish a proposed act, is revocable by the land owner at will and does not rise to the level of an interest in land.

For a more thorough discussion on "possessory interests" relative to mineral interests, see S. Harrison, *supra* note 4 at 133-135.

³⁴The United States Supreme Court defined "patent" as "the conveyance by which the Nation passes its title to portions of the public domain." See *St. Louis Smelting and Refining Co. v. Kemp*, 104 US 636 (1882), and T. Maley, "Mining Laws: from Location to Patent." p. 536.

³⁵Coggins and Van Dyke, *supra* note 2 at p. 650.

Federal (and state) law is applied according to the type and group of minerals under which a particular commodity falls. For example, beginning in 1889, known coal reserves were sold straight out, while all other valuable minerals were subject to "location",³⁶ as defined by the Mining Law of 1872. Since 1889, the law has evolved to exclude other varieties of minerals besides coal from the location system.³⁷ Today mineral location and production under the Mining Law of 1872 is wholly limited to "hardrock" minerals--e.g., gold, silver, lead, copper, etc., on federal land. However, the basic principles - that discovery of a valuable mineral entitles the claimant to the rights of ownership of the mineral and title to the land, and that continued development is required to secure and protect ownership - still prevail today as they did in earlier established common law, and as dictated by the General Mining Act of 1872.

Those mineral commodities not classified as hardrock minerals are allotted through a leasing system. The Mineral Leasing Act (MLA) of

³⁶The location system calls for the marking of boundaries of the claim area, recording the claim with the proper county state and federal offices, and performing a minimum of \$100 dollars of annual assessment work. The area of the claim should also have a "reasonable prospect" for containing a valuable mineral deposit but it is not necessary for there to be a full blown discovery at the time the claim is filed.

³⁷Leasable minerals include coal, oil, and gas. Salable minerals include sand, stone, and gravel. Statutes that dictate the mining and administrative techniques for these other minerals include the Mineral Leasing Act of 1929; the Federal Coal Leasing Amendments Act of 1976; the On shore Oil and Gas Leasing Reform Act of 1987; the Geothermal Steam Act of 1970; the Outer Continental Shelf Lands Act of 1953; the Deep Seabed Hard Mineral Resources Act of 1980; the Common Varieties Act of 1955; and the Acquired Lands Act of 1947. See: Maley, *supra* note 34 at pp. 5-15 to acquire a better understanding of the "chronological development of the significant federal mining statutes."

1920 withdrew fuel and chemical minerals from the location system. Since the passage of the MLA, "statutory and administrative revisions have fragmented the MLA into different leasing systems for the major leasable minerals."³⁸ Today, three main federal mineral allocation mechanisms govern the allocation of minerals: leasing, sale, and location. Other reformations of the 1872 law include removal of certain minerals from the limit, purpose or scope (purview) of the 1872 statute; the requirement of a marketability standard for discovery; the withdrawal of certain lands from mineral exploration and production e.g. national parks and designated wilderness areas; and increased agency regulation of mining operations as stipulated by applicable federal land use laws.³⁹

The Mineral location system requires prospective miners to follow a series of steps to acquire the property rights to hardrock minerals on federal public lands. As mentioned earlier, anyone by right can explore in Montana for the location of valuable minerals on open federal lands. Miners locate promising areas by staking a claim or claims, posting notice, and filing the claim with the proper state and federal agencies. When a claim is considered satisfactorily located, the miner has a valid unpatented mining claim. Then, after a perfunctory degree of assessment work, the holder of a valid unpatented claim is entitled to

³⁸See Coggins and Van Dyke, *supra* note 2 at p 654.

³⁹*United States v. Locke*, 471 U.S 84 (1985) suggests that the private property rights of mining interests are more susceptible to stringent regulation than a purely private property. At some point, however, the public resource becomes purely private property.

receive full "fee simple" ownership to the minerals and the overlying land. Very few claims actually go to patent, and very few candidates can stand up to the discovery scrutiny that results when a patent application is filed. The protocol required by present day mining law (location, recording and patenting of mining claims) evolved from local, territorial and state mining customs and law.⁴⁰ The 1872 Mining Law established the federal government's legal convention for the extraction of minerals on public domain. There has, however, been a history of controversy associated with land disposition schemes - both then and now.

While the federal government did produce incentives to develop agriculture and commerce on the millions of acres of public domain lands acquired between 1787 and 1846, they fully intended to maintain ownership of the public mineral estate these lands held. "Although these enactments resulted in the conveyance of public lands to private individuals and companies, most contained some provision for retention of a portion of the mineral estate for public purposes."⁴¹ Lands classified as "non-mineral" were open for entry while lands classified as "mineral" generally were not. This system of land disposition was open to unforeseeable errors and deceit.

⁴⁰See D. Loop, "Claiming The Cabinets The Right To Mine In Wilderness Areas.", Unpublished Masters Thesis, University of Montana, (1986), p 6.

⁴¹See Harrison, *supra* note 4 at 139-147.

Lands were classified as mineral or non-mineral by authorized officers of the General Land Office, relying on such information as surveyors field notes, affidavits of the entrymen, and testimony of interested parties. Unless agricultural entries were protested or contested, they were likely to be approved. Predictably, these classifications were subject to insufficient information, error and fraud. In the iron-rich region near Duluth and St. Cloud, Minnesota, for example, a special investigator found that of 2,361 homestead entries made in 1884, nearly half were commuted to cash within six months, and less than one-thirtieth were for actual settlement. These abuses were difficult to correct after the fact, for once land was patented, the entryman was granted fee title to all the interests in the land including any minerals subsequently discovered.⁴²

A large portion of the public mineral estate was privatized through the checker board land grants and rights-of-way, awarded to the railroad companies. Again, it was the intention of the federal government to only cede "non-mineral" lands to the railroads. However this often was not the case: "The Southern Pacific Railroad, for example, successfully defended its title to more than 160,000 acres of oil-bearing land in the San Joaquin Valley of California, which it had patented as agricultural lands, despite allegations that it had known the land to be 'mineral when it made the selections.' " ⁴³ Between 1830 and 1888 the government gave away more than 318 million acres of public lands to

⁴²Id. at 142. Also see: R. Robbins. *Our Landed Heritage*, 2d ed. (1976), pp.251-254.

⁴³Id. at 143.

the railroads; 130 million acres of these lands were eventually patented.⁴⁴

Without definitive federal legislation or a clearly defined policy regarding the development of mineral lands on the newly acquired public lands in the Western United States, mining laws were produced and codified by territorial customs, state legislation and judicial recognition. "By 1866, at least five hundred mining districts and another five hundred mining communities controlled the Western mining industry."⁴⁵ In 1866, when Congress finally introduced the first legislated mining act, they opted for the established practices of mineral lands acquisition through free entry and location. For apparent political reasons, Congress probably did not have much leeway to do otherwise. Congress could have used other forms of possessory interests or mechanisms to dispose of the mineral estate, such as leasing, sale, or royalties, but they did not. The Mining Act of 1872 "tied up loose ends" left by the 1866 Act and the Placer Act of 1870⁴⁶.

The Mining Act of 1872 combined the 1866 Act and the 1870 Act. The 1872 Act set out special requirements for the location of "valuable

⁴⁴Id. at 143.

⁴⁵Id. at 146.

⁴⁶Id. at 147.

A major omission of the 1866 Act was its failure to address placer claims, which encompassed a substantial portion of the California gold deposits. To accommodate placer miners, Congress passed the Placer Act of 1870. Under the Placer Act, individual placer claims of 20 acres and association claims of 160 acres could be located and patented for \$2.50 per acre. The Act defined placer deposits as "all forms of deposit, excepting veins of quartz, or other rock in place."

mineral" deposits on public lands, superseding the local laws that dealt with this process. The 1872 law allowed for a property interest separate from the surface estate, but also provided for the patenting of the surface too.

Almost from the moment it was enacted, the 1872 Mining Law was, "wildly regarded as outdated and inadequate."⁴⁷ In 1880 the Public Land Commission recommended that the General Mining Act should be overhauled "for the better security of...title and respect for the rights of property."⁴⁸ The need for reform remains today, over 100 years later. Present day proponents for the overhauling of the location system for hardrock minerals maintain that the General Mining Act of 1872 is an "inefficient remnant of the frontier era, characterized by judicial tinkering with the statute to serve perceived and changing public purposes."⁴⁹ Federal Mining Law asserts the right of mining above all other uses. In fact "this 120 year old statute makes mining the dominant use of all mineralized lands, regardless of other competing resource values such as grazing, recreation, cultural significance or exercise of religion. It has no environmental protection provisions and does not even require reclamation of disturbed lands."⁵⁰

⁴⁷See J. Leshy, "The Mining law: A study in Perpetual Motion," (1987), pp.288-289.

⁴⁸See J. Leshy, "Reforming The Mining Law: Problems And Prospects," The Public Land Law Review, Missoula Montana, (1988), Vol 9, p.2.

⁴⁹Coggins and Van Dyke, *supra* note 4 at 654.

⁵⁰See J. Jensen, "Industry Funds Puppet Organization to Oppose 1872 Mining Law Reforms." The Montana Progressive, Vol. 4 No. 2, (Oct. 1992), pp.1-2.

In the 1990's, various environmental groups and Congressional members are calling for a reforming of the 1872 Mining Law to include: more explicit statutory authority for land use managers to approve or deny permit applications; stronger mining claim language; higher fees for the holding of hardrock mineral claims; the establishment of a royalty-lease system based on the gross value of production; strong reclamation law; clearer agency authority for administering hardrock mining on agency lands; a fund to clean up abandoned mine sites, and greater legal and relief incentives for citizen enforcement (such as recovery of litigation costs and payment of one half all fines or penalties).

Under 1872 Mining law today, miners work 1.2 million claims encompassing 25 million acres, and remove \$4,000,000,000 worth of minerals each year.⁵¹ As in the past, this law places no limits on the effects hard rock mineral development might have on local and regional environments. Many areas throughout the United States, large and small, have been severely damaged by the poisonous wastes generated by mining development.

Nineteenth century American public land law, like the Mining Act of 1872, represents the concerns and priorities of the times: the growth of agriculture and commerce on undeveloped lands. In essence, these laws were legislated in the vacuum created by the rush of people

⁵¹ The Economist, "Mining Reform: A Pickaxe too far," Durango, Colorado, (April 25, 1992), p.27, author unknown.

settling the West regardless of dictum. The 1872 Mining Act was not as ambitious, or visionary, a land disposition tool as it may have been a pragmatic reactive one. Even though the federal government indicated a desire to retain possession of the mineralized lands of United States, the realities of the time dictated otherwise; Congress passed as law the General Mining Act of 1872.

The Philosophy Behind Mining Law

The essence of mining law is philosophically based in the dialectic of John Locke's notion of privatization of land through the use of one's labor and the associated social and institutional expectations that go along with private property holdings.⁵²

God gave the world to men in common, but since He gave it to them for their benefit and the greatest conveniences of life they were capable to draw from it, it cannot be supposed He meant it should always remain common and uncultivated. He gave it to the use of the industrious and rational (and labour was to be his title to it); not to the fancy or covetousness of the quarrelsome and contentious.⁵³

⁵²In reality no one notion truly guides a society's operational beliefs, but certain doctrines can be said to dominate the ethos of a culture. In the case of mining law in the United States I think it is fair to use Locke's view of labor begetting a private property right. But one could just as easily use Hegel to exemplify and justify the concept of private property.

A person has as his substantive end the right of putting his will into any and every thing and thereby making it his, because it has no such end in itself and derives its destiny and soul from his will. This is the absolute right of appropriation which man has over all "things".

G. Hegel, Hegel's Philosophy of Right, (T. Knox transl., p. 41, (1945).

⁵³See S. Hyman, "John Locke on Rights in Property," Law Justice and The Common Good, University Press of America, (1988), p. 221.

Today, as in the past, the main thrust of mining law is the conversion of the commons (federal lands open for mineral entry) into private holdings through the skill, labor and luck of location of a valuable mineral deposit and the development of that deposit.

Locke believed labor had redeemable, quantitative, worth.

For this "labour" being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good left in common for others.⁵⁴

Under Locke's notion of property, anyone who discovers a "valuable mineral deposit" on open public lands, "through their labor", has "rights" to that discovery, no matter what other non-mineral values may exist on that site. There is a catch, however. Privileges gained by labor are not absolute; only where there is "enough, and as good left in common for others." In other words, where recognized values are capable of being depleted or degraded to the harm of the common good one's right, through labor, may, at the very least, be questionable.⁵⁵

⁵⁴Id. at 220.

⁵⁵Property is a concept, not a constant, and translation of the idea into practice has been primarily a judicial function. In other words, property in the end is whatever judges say it is. In the latter half of the twentieth century, property is the converse of regulation. Property in the absolute sense thus is a person's interest in a thing, the diminution of which by regulation will be held by courts to be and impermissible taking. In public natural resource law, the types and forms of property interests and the degree of their judicial protection vary greatly.

Coggins, and Van Dyke, *supra* note 2 at p. 650.

"Congress wrote the 1872 Mining Law for miners, to protect claims from claim jumpers and to provide an incentive to settle the West"⁵⁶ Yet years later, this same legislative body drafted legislation to protect the common holdings of citizens from the destructive influences of uncontrolled development on public lands. But according to a Bureau of Land Management (BLM) representative "the extent to which [a mining company] adjusts its operation to accommodate resource values is substantially voluntary."⁵⁷

Generally speaking, laws come about from some perceived notion of need. This is true for both laws that facilitate development as well as laws that place limits on development. But all in all the role of government - whether through the judicial, legislative or executive branches - is to do something that the market cannot do for itself, namely, to determine, arbitrate, and enforce the "rules of the game."⁵⁸

Laws, Rights, and Property

Government must "play both sides of the fence" when laws conflict. For example, in the case of hardrock mineral development, the government, by law, simultaneously acts to encourage mining development while seeking to buffer the health, safety and welfare of

⁵⁶See L. Erickson, D. Olson, and A. Black, "Reclaiming The Wealth: A citizens Guide to Hard Rock Mining In Montana," The Northern Plains Resource Council, (1990), p.71.

⁵⁷See Mineral Policy Center, "1872 Mining Law Reform Legislation Examined," Clementine, (Spring 1991), p. 4.

⁵⁸See M. Friedman, "Government in a Free Society," Capitalism and Freedom, The University of Chicago Press. (1964), pp.27-32.

the citizenry it represents from the known hazards of mining. Therein lies the conflict. According to a report by Environmental Safety, (an association of environmental and public health professionals), Americans are at greater risk today from pollution than they were two decades ago when the need for protective legislation was recognized and drafted.⁵⁹ Environmental legislation designed to preserve water and air quality, and to promote multiple use of our federal lands, has, in many cases, fallen short of the original intended legislated goals.⁶⁰ Three prohibitive factors cited as the causes of impaired environmental policy are: (1) the lack of explicit language in the law, (2) the lack of clear substantive language in the law, and (3) deficient state and federal enforcement of the law.⁶¹ Mining law language is extremely explicit with regard to the power or privilege to mine. In general, the language of environmental legislation is not comparably explicit and therefore has been open to assailable, and thus, weakening interpretation.

The 1872 Mining Law's "right to mine" doctrine limits the effectiveness of environmental legislation. Nonetheless environmental laws have encroached on the assumed private property rights of a mineral claim holder. Consider:

⁵⁹See W. Drayton, "America's Toxic Protection Gap." Washington, D.C., Environmental Safety, (1984) p. 47.

⁶⁰Id. at p. 71. For example the Clean Water Act (CWA) specifically states: "that discharge of pollutants in navigable waters was to be eliminated by 1985." This goal of the CWA has not been fully realized.

⁶¹Personal communication with Tom France, attorney for the National Wildlife Federation, Missoula, Montana, (April 26, 1992).

Justice Holmes said that property in a mineral consists ultimately in the right to mine it.⁶² An overriding question in the public natural resources sphere is whether a federal mineral lease or a hardrock mineral claim on federal lands actually gives the holder a right to mine-or when, or to what extent. The answer depends on the permissible scope of federal (and state) regulation: the greater the extent that the government can regulate the private interest without having to compensate the holder, the lower the quantum of private property in the regulated thing, and vice versa.⁶³

Because of what amounts to an absolute right to mine granted to miners by this antiquated law, federal and state agencies cannot completely prohibit mining in sensitive areas, but can only mitigate impacts, to a limited degree.⁶⁴ Mining law, for all practical purposes, pre-empts the various federal and state land laws. In essence, the specifically worded intent of a Mining Law's "right to mine" has been treated, and interpreted as the limiting factor; it ultimately dictates to what degree environmental legislation can and cannot be applied. Nonetheless, the 1872 Mining law, a symbol of unbridled development, no longer stands alone.

Legal limits as to the effect a mining operation may have on the various aspects of local ecology have been indirectly applied. Water quality considerations are not specifically provided for in federal

⁶²*Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 414 (1922), quoted from Coggins and Van Dyke, *supra* note 2 at 652.

⁶³*Id.* at 652.

⁶⁴Statement of Bureau of Land Management Great Falls area manager Richard Hopkin at a recent meeting concerning mining exploration in the Sweet Grass Hills. See Jim Jensen, Whites and Native Americans Oppose Sweet Grass Hills Mining, *Down to Earth*, Montana Environmental Information Center, (May 1992), Vol.18, No.2, p. 1.

mining legislation. Environmental regulations are separate from and subordinate to mining laws. In practicality these laws only serve to buffer the effects from a mining operation they do not and cannot eliminate the source of the problem. While, the National Environmental Policy Act (NEPA), or the state equivalent in Montana, MEPA, forces disclosure of possible environmental damage through an environmental impact statement (EIS), other laws require some degree of "reasonable" and "practical" mitigation of the effects of mining. Accordingly, any discussion concerning the mitigation of environmental effects of mining becomes a discussion of degrees and magnitude.

To what degree does a mining right have power and precedence over the health, safety and welfare of other entities as protected under state and federal laws? To what degree are mines regulated? What constitutes reasonable and practical mitigation? Which rights should ultimately be protected under the law - the right to mine or the health of the individual and the ecosystem?

Some of the most important questions of "right" thus turn into questions of degree: how much review, and of which sort, will which agencies of state accord us when we claim our "right" is being infringed?⁶⁵

⁶⁵C. Stone, Should Trees Have Standing? Toward Legal Rights For Natural Objects, Los Altos, California, William Kaufmann, Inc., (1974), p 35.

The notion of a right or rights is often "wildly interpreted". The underlying assumption is that as citizens of this country our rights, as in the alleged right to mine, are etched in some sort of institutional stone and not subject to opinion. But those who work with the law are: "constantly aware that a right is not, as the layman may think, some strange substance that one either has or has not. One's life, one's right to vote, one's property can all be taken away." But those who would infringe on them must go through certain procedures to do so; these procedures are a measure of what we value as a society."⁶⁶

Thus rights evolve and ultimately are subject to change.

For example when this nation realized the environmental devastation caused by coal mining in various regions of the United States, The Surface Mining Control and Reclamation Act was passed. This Act "placed major new constraints on thousands of private property interests in coal, but the Supreme Court rejected without dissent, and without blinking, facial takings⁶⁷ challenges to the act."⁶⁸

⁶⁶Id. at 35.

⁶⁷Takings The fifth amendment to the United States Constitution protects private property; "Nor Shall private property be taken for public use, without just compensation." Recently, the "takings provision has emerged as a critical battleground in the conflict between land development and environmental protection." See F. Williams, "Landowners turn the Fifth into sharp-pointed sword." High Country News, Vol. 25 No.2, (February 8, 1993), pp. 1, 11, 12. Also see Executive Order 12630, "Governmental Actions and Interference With Constitutionally Protected Property Rights," vol. 53, No. 53, (March 15, 1988), pp. 8859-8862.

⁶⁸See *Hodel v. Virginia Surface Mining And Reclamation Ass'n*, 452 U.S. 264, 295-97 (1981); *Hodel v. Indiana*, 452 U.S. 314,333-35 (1981), taken from J. Leshy's, "Reforming the Mining Law." The Public Land Law Review, (1988), p.18.

In *United States v. Locke*,⁶⁹ the Supreme Court stated that the United States government has the power, "with respect to vested property rights...to impose new regulatory constraints on the way in which those rights are used, or to condition their continued retention on performance of certain affirmative duties." Inevitably, the courts said, the Federal government as the "holder of the underlying fee title" has "substantial regulatory power" over an unpatented mining claim.⁷⁰ Further "mining claims are unusual property interests...the very features that make them unusual strengthen rather than weaken the power of government to restrict their use in the public interest."⁷¹ Whether the responsible government agencies actually leverage the regulatory power available to them under the law is another story.

Laws like the Clean Water Act (CWA)⁷² were intended to protect, preserve and re-establish the quality of this country's waters by regulating the sources of pollutants. Often, however, the intent of a law can be weakened by interpretation, stodgy implementation, or a lack of political backing.⁷³ NEPA, like the CWA, has been affected by all of

⁶⁹471 U.S. 84 (1985).

⁷⁰Leshy, *supra* note 48 at 19.

⁷¹*Id.* at 19.

⁷²The Clean Water Act's (CWA), ultimate goal is to eliminate all discharges in surface waters. Public Law number: PL 92-500, U.S. Code citation: 33 USC 1251 et seq. (18 October 1972), Regulations at: 40 CFR 100-140, 40 CFR 400-470, Federal agencies with jurisdiction: Environmental Protection Agency, and Army Corps of Engineers. *An expanded description of the Clean Water Act occurs in section three of this paper.

⁷³See T. Schoenbaum, "Control of Government Decision Making affecting The Environment," Environmental Policy Law: Cases, Readings, and Text. (1982), p. 176-177. (Sax, *The (Unhappy Truth About NEPA*, 26 *Olka. L. Rev.* (1973)).

Here are five basic rules of the game...

1. Don't expect hired experts to undermine their employers.

these. The courts have had to unravel NEPA language, decipher intent, and render decisions; ordering, in some cases, government agencies to simply, comply with NEPA mandates, while other cases required the courts to order restraint in the application of this law.⁷⁴

The resoluteness of a governing body's administration of a law can and should indicate that government's commitment to the spirit of that law. Government agencies, responsible for the leveraging of environmental regulations and rules of procedure, are most often attacked by private citizens and non-governmental organizations, concerned with development and regulatory issues for, what appears to be, their lack of spirit and commitment to environmental law.⁷⁵ For example, while Great Falls BLM area manager Richard Hopkins alludes to the fact that his agency's hands are tied by the General Mining Act, he fails to inform the public that the "BLM's official position has been and continues to be flat opposition to reform of this [1872 Mining Law] anachronism."⁷⁶

2. Don't expect people to believe legislative declarations of policy. The practical working rule is that what the legislature will fund is what the legislature's policy is.

3. Don't expect agencies to abandon their traditional friends.

4. expect agencies to back up their subordinates and professional colleagues.

5. Expect agencies to go for the least risky option (where risk means failing to perform their mission).

"If we want the fullest data to be presented, we must ensure that the data gatherers have no incentives that bind them regularly to any particular client group."

⁷⁴The procedural regulation of federal actions by application of NEPA has caused unexpected and drastic results. This procedural law has severely modified assumed private rights to public minerals, and the future promises more such change. See Coggins and Van Dyke, *supra* note 2 at 652.

⁷⁵France, *supra* note 61.

⁷⁶Jensen, *supra* note 64 at p. 22.

Montana has adopted all federally-produced environmental legislation and has produced some of the more progressive environmental laws in the country. However, some citizens still doubt the State's commitment to govern the health, safety and welfare of the public, as required by law, and its commitment to the "spirit" of Montana's constitution, which recognizes and grants an explicitly worded right to a clean and healthful environment.

The Development Of Environmental Legislation And regulation

We can attribute to ignorance, to some degree, the historic environmental and health problems caused by mining in Montana. But evidence suggests that associations between mining and environmental degradation were made in Europe as early as the Middle Ages. The following quote comes from the first textbook on mining, *De Re Metallica*, published in 1556, and addresses the impacts of mining in Germany:

The strongest argument of the detractors is that the fields are devastated by mining operations...the woods and groves are cut down, for there is need for an endless amount of wood for timbers, machines and the smelting of metal, and when the woods and groves are felled, there are exterminated the beasts and birds...Further, when the ores are washed, the water which has been used poisons the brooks and streams, and either destroys the fish or drives them away...Thus it is said, it is clear to all that there is

greater detriment from mining than the value of the metals which the mining produces.⁷⁷

In Scotland 300 years later and four years before Congress enacted the 1872 legislation, a Scottish Commission on Rivers Pollution studied and reported on the state of that country's rivers. Although the Commission found the greatest impacts to rivers were from sewage and industrial waste, mining was also considered a serious contributor. In 1876 Scotland had enacted The Rivers Pollution Prevention Act in order to protect its rivers from pollution.⁷⁸ The Act seems to have worked in at least one case.

A 1903 report to County Council of Lanark indicated that coal mining was greatly affecting the water quality of some rivers; coal washing was the culprit. Coal washing was a result of a demand for cleaner fuels and allowed for the mining of coal seams previously considered unprofitable because of impurities. Washing the coal cleaned away dirt and other impurities from coal, but put contaminants in the rivers.

The report to County Council of Lanark described farmers complaints: fine coal solids rendered the water unfit for any purpose, many animals refused to drink it, and those animals that did drink the water died. A post mortem on one sheep found four ounces of coal and

⁷⁷Georius Agricola, (1556) *De Re Metallica*, translated by H.C. Hoover and L.H. Hoover, Dover Publications, New York, (1950).

⁷⁸D. Hammerton, "Mineral extraction and water quality in Scotland," Effects of land use on fresh waters, ed. Solbe, J.F. de L.G., Halsted Press, New York, (1986), pp.128,129.

sand particles in its stomach.⁷⁹ By 1909, as a result of prosecutions and continued inspections under the strictures of The Rivers Pollution Act, considerable progress had been made in cleaning up the river.⁸⁰

Eighty-nine percent of the coal washers were of a new cleaner type and the volume of dirty water finding its way to the river was greatly reduced.

In time the United States, too, would recognize that industry and land development were adversely affecting the quality of water and life within its borders. But it was not until the 1970's, almost 100 years after the General Mining Act was placed into law, that the cleaning-up of America's air, water and land became a national priority. We recognize now that intensive, concentrated industry and land development, like mining, possess serious health threats. As a society we know this better now than ever before. The fact that problems have been identified and remedies sought is reflected in a variety of federal laws.⁸¹

⁷⁹Id. at 129.

⁸⁰Id. at 128.

⁸¹ 1964--Wilderness Act (WA)

1964--Land and Water Conservation Fund Act (LWCFA)

1969--National Environmental Policy Act (NEPA)

1970--Clean Air Act (CAA)

1970--Occupational Safety and Health Act (OSHA)

1972--Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

1972--Clean Water Act (CWA)

1973--Endangered Species Act (ESA)

1974--Safe Drinking Water Act (SDWA)

1975--Hazardous Materials Transportation Act

1976--Solid Waste Disposal Act (SWDA)

1976--Toxic Substance Control Act (TSCA)

The Dynamics of Change - Environmental Law

Over time the needs of a people change. As a society we adjust our laws to oblige transforming collective beliefs such as morality, the extension of rights, and who or what may have standing under the law.⁸² Consciousness is dynamic, as are the societal constructs of rights, property and law.

Aldo Leopold, used an example of Odysseus's behavior from the myths of Homer to contradict the moral imperatives of another time:

When god-like Odysseus returned from the wars, in Troy, he hanged all on one rope a dozen slave-girls of his household whom he suspected of misbehavior during his absence.

This hanging involved no question of propriety. The girls were property, the disposal of property was then, as now, a matter of expediency, not of right and wrong.

Concepts of right and wrong were not lacking from Odysseus' Greece: witness the fidelity of his wife through the long years before at last his black-prowed galleys clove the

1976--Resource Conservation and Recovery Act (RCRA)

(HMTA)Transportation Act (HMTA)

1976--Federal Land Policy and Management Act (FLPMA)

1977--Surface Mining Control and Reclamation Act (SMCRA)

1980--Superfund or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

1986--Emergency Planning and Community Right-to-Know Act (EPCRA)

Many of the Federal land use laws in place have state equivalents of these same laws eg. National Environmental Policy Act and the Montana Environmental Policy Act. States were forced to adopt federal environmental legislation under the threat of the loss of federal funding. The reason being that some states, threatened with industry pull outs, created business incentives in the form of lax or non-existent water quality controls. Many states either had no standards or weak standards.

⁸²See Stone, *supra* note 65, at 3-10.

wine dark seas for home. The ethical structure of that day covered wives, but had not yet been extended to human chattels. During the three thousand years which have since elapsed, ethical criteria have been extended to many fields of conduct, with corresponding shrinkages in those judged by expediency only.

Odysseus operated from the hierarchical high ground of his day. Were he alive today he would find that the high ground he occupied has weathered with time, exposing him to the moral and legal culpability of his acts. The forces of changing morality and the laws reflecting these changes have rendered his world obsolete. Today there are laws to protect us from Odysseus-like behavior. Albeit some of these rights have only recently been extended and are continually being plied to secure protection, and standing for all, under the law; nonetheless, they exist.

The accumulation of laws intended to protect our environment (and our civil rights) confirms Leopold's idea that our collective philosophies and concerns have and do evolve. In the past 30 years, state governments and Congress have responded to this changing or dynamic consciousness; enacting legislation and revamping State Constitutions in favor of preserving, protecting and rehabilitating our water and other resources deemed essential.

Today the state of Montana, by Constitutional declaration, supported and confirmed by considerable state and federal legislation, is required to legally, morally and ethically safeguard the health and

safety of its citizens now and in the future by maintaining and improving a clean and healthful environment.⁸³

The reality of water pollution and habitat destruction in the United States, caused by unchecked dumping of toxins in the hydrosphere and poor land-use policies, has given way to a host of protectionist legislation. The intent of these laws is to upgrade, maintain and protect the health, safety and welfare - the quality of life in our society - by preserving and improving the quality of water that we consume both personally and industrially - to avoid the abuses and mistakes of the past.

The Clean Water Act⁸⁴, the Safe Drinking Water Act⁸⁵ and the Endangered Species Act⁸⁶ exist to ensure that valuable resources like

⁸³The Preamble to the Montana State Constitution as ratified by the people on June 6, 1972 states: "We the People of Montana grateful to God for the quiet beauty of our state, the grandeur of our mountains, the vastness of our rolling plains, and desiring to improve the quality of life, equality of opportunity and to secure the blessings of liberty for this and future generations do ordain and establish this constitution." and: Article II SECTION 3 - Declares that all Montanans enjoy an inalienable right to a clean and healthful environment.

Article IX: Environment and Natural Resources
SECTION 1. PROTECTION AND IMPROVEMENT.

(1) The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations.

(2) The legislature shall provide for the administration and enforcement of this duty.

(3) The legislature shall provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources.

⁸⁴The Clean Water Act(CWA), 40 CFR 400-470, 33 USC 1251 et seq, 18 October 1972, Federal agencies with jurisdiction: Environmental Protection Agency, and Army Corps of Engineers.

The goal of the CWA is to restore and maintain the chemical, physical, and biological integrity of the surface waters of the United States. The Act provided that discharge of pollutants in navigable waters was to be eliminated by 1985. An interim

water and wildlife habitat are not degraded with the wastes of doing business. Other laws, like the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (or Superfund) are meant to correct the harm done by previous industrial uses of the land.

goal of the act is to provide for protection and propagation of fish, shellfish, and wildlife in the waters of the country, and to ensure that waters can be used for recreation.

The Acts ultimate goal is to eliminate all discharges in surface waters.

See M. Worobec, Toxic Substances Control Primer, Washington, D.C., Bureau of National Affairs, Inc., (1984), pp. 117-135.

⁸⁵Safe Drinking Water Act, 42 USC 300f et seq., 16 Dec. 1974, 40 CGR 140-149, Federal agency with jurisdiction: Environmental Protection Agency (EPA).

The goal of the Safe Drinking Water Act is to establish uniform federal standards for drinking water quality, protect under ground sources of water, and set up a system of state/federal cooperation to assure compliance with the law and its standards. While the law technically applies only to public water systems serving 25 or more persons, its provisions on ground water contamination also provide a form of protection to individual and agricultural users of groundwater. *Id.* at 137-146.

⁸⁶The Endangered Species Act (ESA), 16 U.S.C. 1531-1543, (1982). The ESA is the most advanced law intended to protect wildlife species and habitat. It confronts the preservation of both "endangered" and "threatened" species and their habitat based upon scientific principles. The Secretary of the Interior must indicate "to the maximum extent prudent," the critical habitat of the species. A summary of the data on which the listing is based must be published and a listing proposal must be finalized or withdrawn within two years. Critical habitat designation is limited to that area "essential to the conservation of the species" The "Economic impact and any other relevant impact" must be considered in the designation decision, and the Secretary can exempt portions of a potential critical habitat if the benefits of exempting the portion out weigh the benefits of designating the entire area as in the Spotted Owl case. The Act imposes obligations on both private persons and government. The relevance of this act to mining in Montana is that many hard rock mining projects are located in or near to critical habitat for threatened and endangered species. Three potential mine start ups are in prime Grizzly Bear habitat, the New World Mine at Cook City, adjacent to Yellow Stone National Park, the ASARCO Rock Creek Mine, and the Noranda, Montore projects in the Cabinet Wilderness Area near Noxon, Troy and Libby, Montana. See T. Schoengau, *supra* note 73 at 401-416.

NEPA and MEPA

The federal government's National Environmental Policy Act (NEPA)⁸⁷, and Montana's equivalent, the Montana Environmental Policy

⁸⁷The National Environmental Policy Act of 1969. 42 U.S.C. ss4321 et. seq., 83 Stat. 852, Pub. L. 91-190.

Purpose: Sec. 2. The purposes of this Act are: to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and, to establish a Council on Environmental Quality.

Title I Declaration of National Environmental Policy Sec. 101.

(a) restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with state and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may-

(1) Fulfill the responsibilities of each generation as trustee for the environment for succeeding generations;

(2) Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

(3) Attain the widest range of beneficial uses of the environment with degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) Preserve important historic, cultural and natural aspects of national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;

(5) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has responsibility to contribute to the preservation and enhancement of the environment.

Act (MEPA)⁸⁸, were enacted to take the environment into account for projects, on lands owned and managed by these two jurisdictions, that will have significant impacts on the local surroundings. NEPA was intended to expand pre-existing statutory rules, in effect, supplementing existing land use legislation.

The bill specifically provides that its provisions are supplemental to the existing mandates and authorizations of all federal agencies. This constitutes a statutory enlargement of the responsibilities and the concerns of all instrumentalities of the federal government.⁸⁹

Originally, NEPA was "acclaimed as one of the most important environmental measures ever enacted."⁹⁰

In form, the National Environmental Policy Act is a statute; in spirit, a constitution:

[Its] statement of environmental policy is more than a statement of what we believe...It establishes priorities and gives expression to our...goals and aspirations. It serves a constitutional function in that people may refer to it for guidance in making decisions where

⁸⁸In regards to the Montana Environmental Policy Act (enacted 1971), interpretation and application, the Montana Supreme Court has specifically stated: "it is appropriate to look to the federal interpretation of NEPA." MEPA legislation has almost wholly been adopted from NEPA legislation both from the perspective of language and intent. Therefore in the writing of this paper NEPA and MEPA, for all practical purposes, are treated as identical, and interchangeable with regards to intent and purview.

See C. Tobias, and D. McLean, "Of Crabbed Interpretations And Frustrated Mandates: The Effect of Environmental Policy Acts On Preexisting Agency Authority." Montana Law Review, Vol.41, (1980) p. 179.

⁸⁹Id. at 189. Testimony of Senator Jackson.

⁹⁰Id. at 179.

environmental values are found to be in conflict with other values.

It is in this sense that the Act must be read.⁹¹

However, when it was time to implement the National Environmental Policy Act a number of federal agencies, eg. the Atomic Energy commission⁹², argued that they were not authorized to "consider in decision-making any environmental factors not expressly provided for in the substantive legislation (The Clean Water Act, The Clean Air Act...etc.) pursuant to which the agency was acting."⁹³ This notion was "summarily dismissed" by the federal courts in *Calvert Cliffs' Coordinating Committee, Inc. v. United States Energy Com'n*.⁹⁴ Between 1971 and 1976 New York, Washington, New Mexico, California, Wisconsin and Montana had similar tests of their respective state versions of NEPA and all but one found their "little NEPA" supplemented existing statutory authority. The Montana Supreme Court saw it differently.

⁹¹Id. at 254.

⁹²The Atomic Energy Commission argued that the thermal pollution caused by nuclear power plants was a matter beyond their jurisdiction: "...its authority extended only to nuclear related matters and that it was prohibited from independently evaluating and balancing environmental factors which were considered and certified by other federal agencies" See R. Findley and D. Farber, *Environmental Law*, West Publishing (1988), p. 23. and *Calvert Cliffs' Coordinating Committee, Inc. v. United States Atomic Energy Commission*, 146 U.S.App.D.C. 33, 449 F.2d 1109, 1112, 17 ALR Fed. 1 (1971).

⁹³Tobias and McLean, *supra* note 88 at 179.

⁹⁴*Calvert Cliffs' Coordinating Committee, Inc. v. United States Energy Com'n*, 449 F.2d 1109 (D.C. Cir. 1971). In Judge Wright's decision he made it clear that the statute establishes a "strict standard of compliance."

NEPA "mandates a particular sort of careful and informed decisionmaking process and creates judicially enforceable duties...[I]f the [agency] decision was reached procedurally without individualized consideration and balancing of environmental factors conducted fully and in good faith it is the responsibility of the courts to reverse."

Findley and Farber, *supra* note 92 at pp. 25-26.

Montana's Supreme Court, in *Montana Wilderness Association v. Board of Health and Environmental Sciences*, (1976) adopted the opposite view from the federal courts virtually gutting MEPA's supplemental, substantive mandate within the state of Montana. Montana's agencies "embraced the [State] courts ruling and extended it"⁹⁵

It is important to remember here that the language of NEPA and MEPA are almost identical and for all practical purposes the intent should be considered identical.⁹⁶

"In testimony before the House Committee on Environment and Resources, the chief sponsor of the measure observed that those sections of MEPA which 'dealt with the responsibility of state agencies for protecting the environment' were taken directly from the national policy act. Finally, the Montana Supreme Court has flatly stated that MEPA is modeled after NEPA."⁹⁷

Even so Montana's aversion to applying environmental laws of MEPA's generation to their fullest potential was encountered early on during the 1970's. Montana's regulatory agencies attempted to side step (and for the most part did) air quality regulations regarding the permitting of Montana Power's Colstrips One and Two - coal fired generating plants, located in Rosebud County, Montana. In a controversial and bitter dispute, the Montana Department of Health and Environmental Sciences (DHES) granted a permit for the construction of

⁹⁵Tobias and McLean, *supra* note 88 p. 179.

⁹⁶*Id.* at 235.

⁹⁷*Id.* at 235.

the two power plants on the basis that they [the agency] "lacked authority to deny a permit to construct a power plant on the grounds not expressly provided for in the air pollution statute." ⁹⁸ The Montana Department of Health and Environmental Sciences, *Final Environmental Impact Statement on the Proposed Montana Power Company Electrical Generating Plant at Colstrip, Montana ii-iii* (1973) also went on to say:

Although MEPA requires this agency to assess all foreseeable impacts that might result from construction of the proposed plant, issuance of the requested permit is contingent only upon adequate demonstration by the applicant of the ability to prevent illegal air pollution. To date, research by the State and the applicant has not indicated that illegal air pollution would result.

The story is not as straightforward as it may appear from reading the text of the Montana Department of Health and Environmental Sciences, final EIS on the proposed Montana Power Company project. The state had to be convinced that consideration of a permit was necessary at all. The Northern Plains Resource Council (NPRC) tried to force a point of regulatory law with regards to an operating permit for Colstrip 1 and 2. The law in this case required that any individual or corporation had to get a permit from the Department of Health before building a polluting structure of any kind.

⁹⁸Montana Department of Health and Environmental Sciences, *Final Environmental Impact Statement on the Proposed Montana Power Company Electrical Generating Plant at Colstrip, Montana ii-iii* (1973).

The following cynical exchange, was taken from the text of Michael Parfit's, Last Stand At Rose Bud Creek. It involved the Department of Health and Environmental Sciences and Montana Power, and should shed a little more light on the nature and mood of this conflict:

McRae [a local rancher and member of the Northern Plains Resource Council] and the NPRC thought this [permit requirement] would naturally apply to the plant, but they soon found out that no such permit had even been applied for. NPRC demanded that Montana Power get a permit from the Department of Health, the company was mildly amused. We're not building a polluting structure - we're just pouring foundations. We'll get the permit in good time about the time we're ready to install a boiler. The Department of Health itself and the judicial system...wouldn't...enforce a very plain specific piece of legislation...it took a citizens group to get the department and the judicial system and perhaps the largest corporate entity in Montana to even pay any attention at all to this law.⁹⁹

The next bit of dialogue between McRae and the state director of the Air Quality Board should further serve to reveal the cynicism faced by the citizens of Montana in their dealings with state regulatory agencies concerning the permitting of the proposed coal fired generating plants.

McRae: 'Okay, now your department has found that Montana Power is constructing what I feel is a potentially polluting facility at Colstrip. They don't have a permit and

⁹⁹See M. Parfit's, Last Stand At Rose Bud Creek, New York, Elsevier-Dutton Publishing, (1980), pp. 93-96.

your department has told us that they don't need a permit until they either install the devices that have the potential of polluting or possibly later on in the construction program than that, when they install the pollution abatement equipment, and I understand there's also a possibility that you might extend this until they start burning coal which has the potential of polluting the environment.'

The director said, 'That's right. We have no ability to turn them down and declare that a potentially polluting device until we find out how much it's going to pollute, what kind of boiler they've got, what kind of pollution abatement equipment.'

"All right,' McRae said 'Lets look at it another way: I don't think there's any doubt in anybody's mind but what a cattle feedlot on a riverbank is a potentially polluting facility.'

The director said he would agree. 'All right. I'm a livestock person. There's a river running by my place. If I want to build a feedlot on that riverbank, now when do I have to get a permit? If you hold the same rules all the way through, I don't need a permit to build the facility until I install the device that has the potential of polluting the environment which is the cattle. Okay, now my question is: When do I have to have a permit to build a feedlot on the bank of a river?'

The director said, 'just before you dig the first post hole.'

Eventually, Montana Power and the State won out--Colstrip power plants One and Two were built.

In July of 1976, while the battle was raging over two new power plants, Colstrip's Three and Four, MEPA was challenged. The Montana State Supreme Court ruled in *Montana Wilderness Association v. Board of Health and Environmental Sciences*, also known as *Beaver Creek I*, that "MEPA requires agencies to consider fully all environmental impacts of their decisions"¹⁰⁰ and "that the construction put upon

¹⁰⁰Tobias and McLean, *supra* note 88 at 243.

statutes by the courts of the state from which they are borrowed is entitled to respectful consideration, and only strong reasons will warrant a departure from it."¹⁰¹ This ruling indicated that a regulatory agency could, in theory and substance, evaluate an operating permit for a mine, or any other ecologically harmful activity based on impacts other than those specifically provided for in the relevant "permit-authorizing statutes". However, five months later, in December of 1976, after a rare rehearing, known as *Beaver Creek II*, the court reversed their original decision, this time concluding that MEPA was not supplementary and substantive in nature and that MEPA did not extend agency control of environmental matters beyond statutorily defined regulations.¹⁰² The present agency practice of procedural EISs,

¹⁰¹*Ancient order of Hiberians v. Sparrow*, 29. Mont. 132, 135, 74 P. 197, 198.

¹⁰²This action was brought by the Montana Wilderness Association and the Gallatin Sportmen's Association, Inc. for declaratory and injunctive relief against a proposed subdivision, Beaver Creek South, in Gallatin County. The district Court of Lewis and Clark County entered a summary judgment, the court found that the environmental impact statement on the proposed subdivision was void, ordering a reinstatement of the prior sanitary restrictions on the subdivision, and prohibiting further development of the subdivision until the reimposed sanitary restrictions were legally removed. The district court found that the EIS prepared by the responsible state agency to be deficient, or not in good faith, with respect to the mandates of the controlling statute, MEPA. The defendants held that "MEPA has no bearing upon the Department's review of the proposed subdivision plan and an environmental impact statement is not required" and that "its responsibilities under MEPA are circumscribed by other statutory authority." In effect their [the defendants] claim flew in the face of the legislated, supplemental and substantive intent of NEPA-MEPA. The defendant, the Board of Health and Environmental Science and the Department of Health and Environmental Sciences of the State of Montana, and the intervener, Beaver Creek, Inc. appealed. The district courts judgement was affirmed by the Montana State Supreme Court. A request for a rehearing by the defendants was granted and the two previous judgements were overturned. A rehearing by the State Supreme Court is a rare occurrence; speculation as to the political nature of

(where all environmental impacts of a mining operation are considered but only certain impacts are deemed relevant to the issuance of an operating permit) could be considered a direct result of this judicial finding.¹⁰³

Between July, and December, 1976, Montana's Environmental Quality Council (EQC), published a critical analysis of MEPA, entitled *The Montana Environmental Policy Act: The First Five Years*. This report identified "considerable misunderstanding" as to the effect that MEPA had on the role of agencies and "uncertainty" regarding the intent of EIS preparation. The EQC report went on to describe a general regulatory distaste for applying MEPA legislation to the permitting process:

There is general confusion as to MEPA's effect on an agency's authority to grant or deny a permit. If other, more specific statutes would allow for permit approval, agencies are reluctant to deny the permit on MEPA grounds,

the rehearing issuance has been voiced. This, landmark case for Montana, became known as *Beaver Creek I and II*.

The following is Justice J. Haswell's dissenting opinion regarding *Beaver Creek II*:

"The decision of the Court today deals a mortal blow to environmental protection in Montana. With one broad sweep of the pen, the majority has reduced constitutional and statutory protections to a heap of rubble, ignited by the false issue of local control."

Montana Wilderness Ass'n v. Board of Health and Environmental Sciences, 171 Mont. 477, 486, 559 P.2d 1157, 1161 (1976) (Haswell, J., dissenting).

¹⁰³The DSL as an agency of the State of Montana, acting pursuant to laws passed by the Montana Legislature must be governed by such state law as interpreted by the Montana Supreme Court. The Montana Supreme Court in *Montana Wilderness Association*...held that the Montana Environmental Policy Act is not regulatory in nature. The court withdrew an earlier opinion which held that MEPA authorized the agency to take into consideration environmental factors other than those specifically contained in the permitting legislation. *Montana Department of State Lands, Final Environmental Impact Statement on the Proposed Plan of Mining and Reclamation for Troy Project ASARCO Inc., Lincoln County, Montana* 113-14 (1978).

regardless of the severity of environmental harm which may result...The most pervasive obstacle to effective implementation of MEPA in the permit process is the lack of consistent definition of agency authority. When agencies grant or deny permits or licenses, they are operating under specific statutory authorizations which, in most cases, set out conditions for granting or denying permits. Agencies hesitate to rely on the policy statements and directives of MEPA as a basis for decisionmaking, preferring to limit their considerations to the range of factors set out in the specific permit-authorizing statute.

In many cases, MEPA's only effect is to delay the announcement of decisions, which are made without regard to MEPA's policies in any event, until an impact statement is prepared...The environmental impact statement becomes a meaningless exercise in data compilation, designed to avoid litigation and to support decisions, which are made on other than MEPA grounds. In this context, it is not surprising that EIS's are viewed by most agency personnel as a cumbersome, expensive, and superfluous burden.¹⁰⁴

Today the Montana Environmental Policy Act is interpreted as requiring Montana's state agencies to carry out what amounts to a procedural environmental analysis or where a project will "significantly [affect] the quality of the human environment" an environmental impact statement.¹⁰⁵ Such a procedural analysis will analyze and disclose all

¹⁰⁴Tobias and McLean, *supra* note 88 at 241.

¹⁰⁵The Department of State Lands criteria for assessing significant impacts are similar to those of all other Montana agencies:

- (1) the severity, duration, geographic extent, and frequency of occurrence of the impact;
- (2) the probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- (3) growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;

the impacts but will not deny a permit on any basis other than those listed in permitting legislation. MEPA, as interpreted by the Montana Supreme Court, does not give the state agencies a substantive or supplemental ability to deny, or for that matter, grant a mining permit. The Court concluded this power can only be accorded by the substantive directives of the appropriate applicable legislation. For example Montana's water quality laws¹⁰⁶ provide for a Non-degradation Policy¹⁰⁷ of water quality, whereby a permit for a development venture is contingent upon that activity's effect upon

(4) the quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;

(5) the importance to the state and to society of each environmental resource or value that would be affected;

(6) any precedent that would be set as a result of and impact of the proposed action that would commit the department to future actions with significant impacts or decision in principle about such future actions; and

(7) potential conflict with local, state, or federal laws requirements, or formal plans.

See supra note 56 at 48.

¹⁰⁶Montana Code Annotated (1991), General Provisions of Montana's Water Quality Act: 75-5-101. It is the public policy of this State to:

(1) conserve water by protection, maintaining and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses;

(2) provide a comprehensive program for the prevention, abatement, and control of water pollution.

¹⁰⁷Montana Code Annotated, 1991, 75-5-303. Non-degradation Policy. The board shall require:

(1) that any state waters whose existing quality is higher than the established water quality standards be maintained at that high quality unless it has been affirmatively demonstrated to the board that a change is justifiable as a result of necessary economic or social development and will not preclude present and anticipated use of these waters; and

(2) any industrial, public, or private project or development which would constitute a new source of pollution or an increased source of pollution to high-quality water, referred to in subsection (1), to provide the degree of waste treatment necessary to maintain that existing high water quality.

water quality. In other words, an operating permit for a mine could theoretically be denied if an EIS, or some other scoping process, demonstrates that compliance with the non-degradation provision of the water quality regulations for Montana is not feasible. MEPA, according to the Montana Supreme Court, is not regulatory in character, and therefore cannot be the legal justification for permitting decisions. In contrast, Montana's water quality laws are regulatory and include substantive legal devices.

However, by the State's own admission, the non-degradation provision (Codified in 1971) of state and federal water quality laws has not been "systematically" applied to mining until 1990.¹⁰⁸ The State, in effect, has not implemented, at least, one critical substantive provision (Non-degradation of water quality) of environmental law for almost twenty years.¹⁰⁹ One could easily presume that this provision of the law

¹⁰⁸Environmental Quality Council, SJR 22, *Interim Study On Ground Water Quality Protection And Management, Final Report to the 52nd Montana State Legislature*, (December 1990), p. 51.

The Department of Health and Environmental Sciences and the Board of Health and Environmental Sciences did not systematically apply this [non-degradation] provision to mining operations in the past. However, during the past year the DHES began notifying mining companies that they must obtain a waiver of the non-degradation policy from the BHES if their proposed mining operations could potentially cause water quality degradation. Mining Representatives assert that it will be problematic for the industry to comply with a strict interpretation of this requirement.

¹⁰⁹See Environmental Quality Council, *supra* note 108 at 51, M. Dennison, "Mine records reveal 1 1/2 years of violations", Missoulian, (Jan. 24, 1992), pp. 1, A-10, Bob Anez, "Pointing Fingers: State Lands criticized for letting Noranda violate water rules," Missoulian, (Feb. 20, 1992), p. 2B, S. Devlin, "Groups warn state to enforce water quality," Missoulian, (Aug. 22, 1991), pp. 1, A-9, "ASARCO seeks water variance," Sanders County Ledger, (March 8, 1990), pp. 1, 8, and "CRG [Cabinet Resource Group] mulls lawsuit against ASARCO," Sanders County Ledger, (Feb. 15, 1990), p. 1.

was not applied to the Montana Department of State Land's (DSL) Final *Environmental Impact Statement on the Proposed Plan of Mining and Reclamation for the ASARCO Troy Project* in 1978, and that a breach of the State's regulatory responsibilities occurred then and continued to occur until recently.¹¹⁰ In fact, environmental groups have challenged the Department of State Lands', and ASARCO's compliance with water quality regulations at the Troy mine since the project began.

In one such challenge, *Cabinet Resource Group. v. Montana Department Of State Lands*,¹¹¹ a case dealing with the question of the effects of MEPA on mine permitting at the ASARCO Troy Mine, near Troy, Montana, the state and ASARCO, held that "even if MEPA does, in some instances give agencies substantive permitting authority, it does not grant DSL such authority in hard rock mine permitting." DSL went on to say that only Section 82-4-351 Montana Code Annotated (MCA) of the Hard Rock Mining Act (HMRA), authorizes State Lands' to condition or deny permits on three grounds: air, water and reclamation. The Court did not agree. In Judge Bennett's written opinion, he found that "There is...no conflict between MEPA and the HRMA, and DSL can therefore reject or condition a permit on environmental grounds additional to

¹¹⁰On 15, February 1990 the Cabinet Resource Group (CRG) served notice on ASARCO with the intent to begin a civil action against that company for violation of federal clean water standards. The CRG charged that "ASARCO has discharged and continues to discharge pollutants from its mine, mill and tailings pond located near Troy, in violation of the (federal) Clean Water Act." See: "CRG mulls lawsuit against ASARCO," Sanders County Ledger, (February, 1990), p. 1.

¹¹¹*Cabinet Resource Group. v. Montana Department Of State Lands*, No. 43914 (1st Dist. Ct. Mont. 29 September 1982) (interim ruling, subsequent settlement 7 February 1986).

those listed in Section 82-4-351, MCA."¹¹² In the court's view, MEPA, buttressed with the Montana Constitution and backed by the appropriate Federal case law, provided the necessary authority for a Montana state regulatory agency to condition or deny a permit on MEPA grounds. The court also indicated that the defendants claim that the decision in *Wilderness Association v. Department of Health*, absolved them from applying MEPA as a substantive tool was false, since "that case was decided on the basis of a conflict between MEPA and the Subdivision and Platting Act, a factor which is not present here."¹¹³ Judge Bennett narrowly construed the effect of the *Wilderness Association v. Department of Health* decision on MEPA's substantive and supplementary powers with regards to mining.

Even though the State agreed to this decision¹¹⁴ (DSL and ASARCO did not choose to appeal Judge Bennett's decision thus they accepted the opinion of the Court) DSL has consistently claimed, both by their actions and stated policy, that they are mandated to issue a mining permit "unless it is demonstrated that reclamation cannot be accomplished or that air and water quality standards will be violated - these are the only grounds the Department may use in denying a

¹¹²Id. at 5 of opinion.

¹¹³Id. at p. 8.

¹¹⁴The opinion of the court in *Cabinet Resource Group. v. Montana Department Of State Lands* is essentially moot, any further review (in a hostile higher court) could jeopardize Judge Bennett's decision rendering it useless as a potential justification in a future similar suit. The DSL may have lost this particular case, but can still go on as usual backed by the State Supreme Court's decision in *Beaver Creek II*.

permit."¹¹⁵ And on these grounds, in 1991, the DSL and the Golden Sunlight Mine were served with a complaint for declaratory judgment and injunctive relief, charging, in part, faulty reclamation and regulatory compliance. The suit was brought by *National Wildlife Federation et.al. v. Montana Department of State Lands*, and is in the process of litigation.

On September 28, 1992, DSL lost another district court case, *Montana Environmental Information Center v. DSL*.¹¹⁶ DSL refused a request for a copy of the environmental assessment prepared on the exploration permit for the Montanore project, near Libby, Montana. Sandy Olsen, chief of the Hard Rock Bureau of the Montana DSL refused the request citing "confidentiality of application information," provided for under Section 82-306, Montana Code Annotated. The plaintiffs contended the confidentiality law violated the constitution's mandate, of the "Right to know" provision under Article II, Section 9. The provision states:

Right to Know. No person shall be deprived of the right to examine documents or to observe the deliberations of all public bodies or agencies of state government and its subdivisions, except in cases in which the demand of individual privacy clearly exceeds the merits of public disclosure.

¹¹⁵Sandi Olson's testimony from the Environmental Quality Council meeting on Heap Leach Gold Mining, March 9, 1990.

¹¹⁶*Montana Environmental Information Center v. DSL*, Lewis and Clark, CDV-92-20, 9-28-92.

Although DSL argued that the legislature had performed the required constitutional balancing test with regards to the confidentiality statute, and therefore they need not comply with the request for the environmental assessment, the court disagreed. Judge Honzel concluded "the blanket provision of Section 82-4-306, MCA, which requires DSL to keep all information confidential, is unconstitutional on its face." Although proprietary geological information is entitled to protection in accordance with Article II, Section 9, non-proprietary information is not. The result is that DSL can no longer deny a request for environmental data or non-proprietary information used in the assessment of a mining permit as DSL has held.

In summary Montana's regulatory agencies have been slow in taking up with state and Federal environmental laws, and have had to be encouraged into clarifying their mandated role by law. Five reasons justify this claim:

- (1) The assorted legal challenges to state environmental regulatory policies.
- (2) The states own admission of failing to apply, a law the agencies readily admit has the substantive legal capacity to regulate by conditioning or rejecting a mining permit. The non-degradation of water quality regulation has not been systematically applied, for twenty years.
- (3) The controversy surrounding the permitting and construction of the Colstrip power plants and the cynical exchange presented in this section.
- (4) The Beaver Creek I and II decisions: Even though the Montana State Supreme Court eventually decided MEPA was a non-regulatory, non-substantive, non-supplemental

provision of environmental legislation, and therefore could not be used to condition or refuse a permit, the court, upheld the procedural duty of the agencies, requiring an EIS, in good faith, where applicable. This was a controversial case, which generated substantial written analysis and criticism. The critiques indicated poor judicial review where politics played the deciding role.¹¹⁷

(5) At the same time other state and Federal courts found that their versions of NEPA were regulatory in nature the Montana Supreme court, guided by the Montana Constitution, found otherwise.

But any way you look at it, the second *Montana Wilderness Association v. Board of Health and Environmental Sciences* decision, sent Montana's residents and regulatory agencies back to pre MEPA/NEPA days, but with two exceptions: the EIS requirement, and the Montana Constitution.

Montana's Constitutional Guarantee of a Clean and Healthful Environment

A crucial point of Montana Constitutional law needs to be addressed here. In 1976, when the *Beaver Creek II* decision was handed down, Montana's revised Constitution was in place. It is a rather unique document in the sense that it specifically identifies the right to a clean and healthful environment as inalienable¹¹⁸ and makes provisions for

¹¹⁷Personnel contact with attorney familiar with this case (Feb. 1993).

¹¹⁸All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environment and the rights of pursuing life's basic necessities, enjoying and defending their lives and liberties, acquiring, possessing and protecting property, and seeking their safety, health and happiness in all lawful

the protection and improvement of the environment.¹¹⁹ The constitution also specifically requires reclamation of disturbed lands where natural resources have been taken.¹²⁰ "The state and each person" are charged with the responsibility to uphold the basic tenets of this constitutional decree. Simply put, the State Supreme Court and the agencies have not fulfilled their responsibility, as prescribed by the Montana State Constitution.¹²¹

The state constitution is the mandate of the sovereign people to its servants and representatives. No one of them has a right to disregard its mandates, and the legislature, the executive officers, and the judiciary cannot lawfully act beyond its limitations.¹²²

It is quite interesting that the same court that ignored the environmental mandates of the state constitution a year earlier in the *Beaver Creek II* decision would in another case, *General Agriculture Corp. v. Moore*, take the stance quoted above.

In consideration of the government's behavior and treatment of MEPA's "supplementary substantive" intent, Tobias and McLean, in a

ways. In enjoying these rights, all persons recognize corresponding responsibilities. Mont. Const. art. II, section 3.

¹¹⁹Tobias and McLean, *supra* note 88 at 252.

¹²⁰"All lands disturbed by the taking of natural resources shall be reclaimed." Article IX, Section 2. Reclamation Montana Constitution.

¹²¹This would not be the first time a Supreme Court, state or federal, has wrongly decided a case. See *Dred Scott v. Sandford*: "The verdict of history and legal scholarship is clear in its conclusion that the Dred Scot decision was wrong" both legally and morally. Arthur J Goldberg, The Defenses of Freedom, Harper and Row, New York, (1966) p. 75-76.

¹²²*General Agriculture Corp. v. Moore*, 166 Mont. 515-516, 534 P. 2d 862-863 (1975).

Montana Law Review article, *Of Crabbed Interpretations and Frustrated Mandates*, notes.

The state agencies, and to some degree the Montana Supreme Court, have interpreted the Montana Environmental Policy Act in a way that finds no support in any other jurisdiction or in the intent of the Montana legislature, as expressed in the statutory language and legislative history of the act. By according MEPA such a narrow construction, the agencies have ignored their constitutional obligations and violated the inalienable rights of the citizens of Montana. The legislative intent of the Montana legislature as buttressed by the unequivocal constitutional duty to prevent degradation of the environment by the state, imposed a clear and incontrovertible obligation upon Montana agencies: they must consider fully in decisionmaking all environmental impacts of their actions, including those not expressly provided for in the substantive legislation pursuant to which they are acting. Until the state agencies comply with this mandate their crabbed interpretation will continue to make a mockery of the Montana Environmental Policy Act.¹²³

It has long been known that the various branches of government who are responsible to the public interest for environmental regulatory action and policy implementation have had trouble sorting out their roles and responsibilities in the political and economic scheme of things. Justice William Douglas in a United States Supreme Court decision, *Sierra Club, v. Morton*, addressed this dilemma in his dissenting opinion explaining that:

¹²³Tobias and Mclean, *supra* note 88 at 267.

It is, of course true that most of them...[inanimate objects which are the very core of America's beauty]...are under the control of a federal or state agency. The standards given those agencies are usually expressed in terms of the "public interest." Yet "public interest" has so many differing shades of meaning as to be quite meaningless on the environmental front. Congress accordingly has adopted ecological standards in the National Environmental Policy Act of 1969, Pub. L. 91-90, 83.Stat. 852, 42 u.s.c. 4321, et seq., and guidelines for agency action have been provided by the Council on Environmental Quality...See 36 Fed. Reg. 7724.¹²⁴

The pressures on agencies for favorable action one way or the other are enormous. The suggestion that Congress can stop action which is undesirable is true in theory; yet even Congress is too remote to give meaningful direction and its machinery is too ponderous to very often. The federal agencies of which I speak are not venal or corrupt. But they are notoriously under the control of powerful interests who manipulate them through advisory committees, or friendly working relations, or who have that natural affinity with the agency which in time develops between the regulator and the regulated.¹²⁵

With each new environmental law tacked on to what already exists the job of the regulatory agencies becomes more difficult. But, even so, where environmental legislation is concerned, mining seems to be excluded from the legal demands placed on most other industries.

¹²⁴Mr. Justice William Douglas, Supreme Court of The United States dissenting opinion, No.70-34, (April 19, 1972): *Sierra Club, Petitioner, v. Rogers C. B. Morton*, Individually, and as Secretary of the Interior of the United States, et al., On Writ of Certiorari to the United States Court of Appeals to the Ninth Circuit.

*As taken from: Stone, Christopher D., Should Trees Have Standing? Toward Legal Rights For Natural Objects, Los Altos, California, William Kaufmann, Inc., (1974), pp.76-77.

¹²⁵Id. at 76-77.

Other Attempts at Regulation Of Mining Wastes

In 1986, following the Union Carbide disaster in Bhopal, India, Congress passed the Emergency Planning and Community Right to Know ACT (EPCRA). EPCRA attempts to monitor the disclosure of toxic releases into the environment. The main premise of this legislation is that people have a fundamental right to know what harmful chemicals are being used and released in their local communities and environments.

Mining companies are exempt from a key section of EPCRA, Sec. 313, the Toxic Release Inventory (TRI), which requires disclosures to the public of annual estimates of toxic chemical emissions.¹²⁶

EPCRA does not regulate or control toxic chemical emissions, it merely requires companies to reveal the following data to the government and the public:

- 1) quantities of any designated "extremely hazardous substances" that are released accidentally to the environment;
- 2) the quantities of all "hazardous chemicals" stored on site;
- 3) estimates of the total quantities of any of more than 320 toxic chemicals released to the environment over the course of each calendar year either accidentally or as part of routine operations.

¹²⁶See D. Horowitz, "Mining and Right-to-Know", Clementine, Mineral Policy Center, (Winter, 1990), pp. 10-12. Mining operations are exempt from a number of laws dealing with control and tracking of hazardous waste and materials. For example, an amendment to the Resource Conservation and Recovery Act (RCRA) exempts the mining industry from compliance with the federal hazardous waste regulatory provisions of that law.

Although mining operations are not required by law to release this information, in 1988 Kennecott Copper, a well known mining and mineral processing firm, mistakenly filed TRI reports with the EPA for its mineral extraction and beneficiation operations. Of the more than 18,000 facilities that reported TRI data that year, Kennecott was ranked fourth in the nation in total toxic releases to the environment, and first in releases of toxic metal.

The Resource Conservation and Recovery Act (RCRA)¹²⁷ another law designed to address the problems of waste disposal, also excludes mining from the law's purview. Under RCRA, the Environmental Protection Agency was given the authority to develop regulatory programs for hazardous and solid waste from the extraction, beneficiation, and processing of ores and minerals. The job proved to be a problem for the EPA because of the sheer volume of "relatively low

¹²⁷The Resource Conservation and Recovery Act (RCRA), Public Law number: P. 194-580, U.S. Code citation: 42 CFR 240-271, Federal agency with jurisdiction: Environmental Protection Agency (EPA). The Act was passed to control all varieties of solid waste disposal and to encourage recycling and alternative energy sources. Its major emphasis is control of hazardous waste disposal. RCRA establishes a system to identify wastes and track their generation, transport, and ultimate disposal. Standards for disposal sites and state hazardous waste programs also are included. RCRA is designed to regulate the activities of all parties dealing with wastes that EPA lists as hazardous. Wastes are considered hazardous if they exhibit any of four characteristics: ignitability, corrosivity, reactivity, or toxicity. If a waste fits one of these categories and is listed as hazardous, those who generate, transport, or dispose of such materials must comply with a variety of notification and record keeping requirements so that such a substance generated, transported, stored, or disposed of in the United States may be tracked for 30 years. This law also provides for a monitoring program of disposal sites, and provides stringent penalties and enforcement mechanisms. See Worobec, *supra* note 84 at 151-174.

level" toxic wastes generated from mineral production. The EPA decided that it was "inappropriate to regulate mining waste as 'hazardous'."¹²⁸ In 1980 mining was specifically exempted from regulation by the Beville Amendment. The amendment did call for the EPA to figure out a way to regulate mining under RCRA, but to date little progress has been made.

Hence the environmental standards guiding mineral development are at a lower level than for other industries. It is the enormous volume of debris generated during the mining process that makes regulating these wastes inconvenient. Although mining wastes are not classified as hazardous under RCRA this by no means indicates that they are harmless. We know that over time heavy metals and other toxins leach out and concentrate - threatening the health of living organisms. It is this knowledge that has inspired society to make some effort at regulating mining's health and environmental effects.

Montana's Department Of State Lands

The Department of State Lands (DSL) regulates mining in Montana for the most part, but it's not as simple as that. Mining is regulated by an inter-agency review process. Which agencies are involved, and at what level, depends on the land trust status of the particular property being mined, and what overlap there is into State jurisdictional

¹²⁸See supra note 56 at p. 76.

grounds.¹²⁹ In any case, the regulatory agencies, (both state and federal) involved in a mine-permitting scenario may include some or all the following:

STATE:

Montana Department of State Lands
 State Historic Preservation Office
 Montana Department of Health and Environmental Sciences including:
 Air Quality Bureau and Water Quality Bureau.
 Montana Department of Natural Resources and Conservation Local
 Conservation District
 Hard Rock Mining Impact Board

FEDERAL:

U.S. Forest Service
 Bureau of Land Management
 U.S. Fish and Wildlife Service
 Army Corps of Engineers

In March 1990 Sandy Olsen, chief of the DSL's Hard Rock Bureau testified at hearings before the Environmental Quality Council. According to Olsen, mining is regulated primarily by two statutes: the Metal Mine Reclamation Act (MMRA)¹³⁰, and the Montana

¹²⁹For a more complete and concise description of the permitting procedure see: Erickson, Olson and Black. Reclaiming The Wealth: A Citizen's Guide to Hard Rock Mining in Montana, The Northern Plains Resource Council, (1990), pp. 79-89.

¹³⁰Montana Code Annotated, (1991) 82-4-302. Purpose: (1) The purposes of this part are to provide:

(a) that the usefulness, productivity, and scenic values of all lands and surface waters involved in mining and mining exploration within the boundaries and lawful jurisdiction of the state will receive the greatest reasonable degree of protection and reclamation to beneficial use;

(b) authority for cooperation between private and governmental entities in carrying this part into effect;

(c) for the recognition of the recreational and aesthetic values of land as a benefit to the state of Montana; and

Environmental Policy Act (MEPA)¹³¹. When mining takes place on Forest Service and Bureau of Land Management land, the DSL must also coordinate with those agencies to perform a "multiple interdisciplinary review". When a proposed mine is at least partially located on federal land the DSL, FS and BLM negotiate as to who will be the "lead agency." No matter who the lead agency is, the provisions of NEPA and other federal laws must be met.

DSL has thirty days to review an application. The agency is responsible for notifying the public and for the review of the application. The DSL reviews the completed application to determine whether it conforms with the Montana Environmental Policy Act, "which supplements" the Hard Rock Mining Statute. MEPA only requires that the Department look at "all the issues and cumulative impacts associated with the proposed project." When this review is satisfactory the DSL "has thirty days in which to complete an environmental assessment on the project" and to get the "public involved in decision-making." "Depending on the nature of the project and if an EIS is required," the Department "has 365 days to complete scoping, produce a draft, have hearings, and produce a final interagency decision"

(d) priorities and values to the aesthetics of our land scape, waters, and ground cover.

(2) Although both the need for and the practicability of reclamation will control the type and degree of reclamation in any specific instance, the basic objective will be to establish, on a continuing basis, the vegetative cover, soil stability, water condition, and safety conditions appropriate to any proposed subsequent use of the area.

¹³¹ 75-1-105 Montana Code Annotated (1992).

Other statutes that apply during the review process include: the Air and Water Quality Acts, the Endangered Species Act, the Antiquities Act, Stream Bank Preservation Act, and the Facility Siting Act. These laws have great potential for improving Montana's mining industry, but only with support from the courts and implementing agencies, as well as public concern.

The permitting process, according to Sandy Olsen, requires data analyses; this is especially true in regard to water resource analysis. Surface water and groundwater characterization are surveyed in order to delineate and compile baseline data¹³² of the physical and chemical properties of the hydrologic system. DSL's job is to locate and identify aquifers, springs, and wells in the area which could be affected by the mining project. DSL is also responsible for "calculating the permeability of the rock, identifying the geologic foundations and features, major flow rates and looks at complete geometric surfaces and then for cumulative impacts, the department also examines the soils chemical and physical characteristics."¹³³

"As a rule of thumb, the larger operations have the potential to create greater impacts," so the department requires that they produce

¹³²Baseline Data or a Baseline Study for a mining project or any other land use treatment establishes the existing environmental conditions of an area before that area can be impacted by the proposed project. In essence baseline data permits a before perspective to better assess the after affects of a development. Ultimately the information can be used to appraise the effects of a mining operation on the natural resources of locality. This information can help to establish the need for additional mitigation measures, or can assist a court to identify responsible parties and exact adequate relief to the plaintiff(s) in the event of an accident.

¹³³Olsen, supra note 115.

"more data" in support of their projects than the smaller operations.¹³⁴ But to reiterate none of these data will be used to reject a mining permit. The information will be used in the hopes of mitigating the effects of the proposed mining project.

DSL's Mandated Role of Mining Proponent

As stated earlier, DSL is mandated to issue a mining permit, according to Olson, unless it is demonstrated that reclamation cannot be accomplished or that air and water quality standards will be violated. To date, no mining permit has ever been refused on any of these grounds. The mandates of the 1872 Mining Law have been perceived by the regulatory agencies to preclude any other uses of public lands open to mineral entry. Although the courts have, in many cases, actually served to erode this notion implicitly indicating that "the property rights in the mining locations are considerably less than absolute," the tendency is to assume the rights of miners over the rights of others. Today probably more than ever, the management of the public mineral estate is prone "to the conflict between the historical

¹³⁴ See supra note 115, Sandi Olson identified a number of the larger mines with "more potential for risk" these include: the Mineral Hill Mine at Jardine, Zortman-Landusky Mine, Golden Sunlight Mine, one active and two proposed silver mines in the Noxon-Troy-Libby area, Butte, Whitehall, Fairmont-Whitehall, Basin, Pony and Alder Gulch areas. In addition there are nineteen small miners grandfathered in under House Bill 679 from compliance with cyanide regulations. However, "all operations, regardless of size and regardless of H.B. 679 must comply with the Water quality Act." "So even though the nineteen exempt small miners "may not be getting reviewed under the MMRA they are being reviewed under the Water Quality Act."

disposal of public natural resources and the modern trend toward their preservation and conservation"¹³⁵

Inevitably hardrock mining is protected by an explicit "right to mine" coupled with the granting, by law, of a "fee simple private property right" protected by the takings provision of the fifth amendment of the United States Constitution. Whether NEPA can ultimately play a role in "disapproving a mining plan indefinitely or permanently on the ground that the environmental harm caused by the activity out weighs the possible economic benefits" remains to be seen.¹³⁶

Today the status of NEPA legislation throughout the United States has gone by way of the view sanctioned, early on, by the Montana Supreme Court.¹³⁷ But this is not to say that NEPA legislation has not changed the face of mineral development in America, it has. "NEPA questions seldom arose in hardrock mining contexts because the land management agencies did not attempt to regulate prospecting or mining."¹³⁸ However, when cases began cycling through the courts the

¹³⁵See Harrison, *supra* note 4 at 132.

¹³⁶See Coggins and Van Dyke, *supra* note 2 at 674.

¹³⁷Various cases have led up to NEPA's present day status as a procedural but not substantive requirement of the law e.g.: *Harrisburg Coalition Against Ruining the Environment v. Volpe*, 330 F. Supp. 918 (M.D. Pa. 1971); *Environmental Defense Fund v. Corps of Eng'rs*, 325 F. Supp. (749 E.D. Ark. 1970) (Gillham I); *Environmental Defense Fund v. Corps of Eng'rs*, 325 F. Supp. 749 (E.D. Ark. 1971) (Gillham II); *Calvert Cliffs' Coordinating Comm., Inc v. United States Atomic Energy Comm'n*, 449 F.2d 1109, 1116 (D.C. Cir.1971); *Aberdeen & Rockfish R.R. v. Students Challenging Regulatory Agency Procedures*, 422 U.S. 289, 319 (1975) (SCRAP I); *Andrus v. Sierra Club*, 442 U.S. 347, 350-51 (1979); *Weinberger v. Catholic Action of Haw.*, 454, U.S. 139, 141 (1981)

¹³⁸See Coggins and Van Dyke, *supra* note 2 at 673.

opinions have consistently held that "mineral rights are subject to reasonable regulation, but that the regulation cannot go so far as to prohibit or unduly burden actual mining."¹³⁹ The courts have over and over again upheld the EIS requirement and other regulatory actions, where hardrock mining projects would have significant consequence beyond a certain threshold.¹⁴⁰ In Montana, federal and state agencies require that a miner submit a plan of operations for agency approval, "but the regulations do not specifically reserve the power to disapprove, although that power seems implicit in the power to delay or condition approval."¹⁴¹

The ultimate question in minerals regulation is still lurking out there: can an agency "indefinitely or permanently...disapprove a mining plan of operations on the ground that the environmental harm caused by the activity outweighs the possible economic benefits from it?"¹⁴² Given the laws, regulations, and case law available to the state of Montana in controlling mining, the answer seems to be yes.

The state of Montana is unique in that its Constitution has built into it both implicit and explicit self actuating provisions for agencies to take into account environmental protection and reclamation of disturbed lands. However Montana law could, ultimately, be preempted by Federal law if the state went so far as to exercise its power

¹³⁹Id at 675.

¹⁴⁰Id. at 674.

¹⁴¹Id. at 674.

¹⁴²Id. at 674.

and discretion by denying a mining permit, as the laws of this state imply it can.¹⁴³ But no matter what the implications may be, while government agencies are trying to sort out their often contrasting, official and un-official roles, one thing is for certain, gold mining in Montana is on the rise.

¹⁴³There are three ways a state regulation may be preempted by federal law.

(1) Where Congress intends through legislation to occupy a given field, any state law falling within that field is preempted.

(2) Where congress has not completely occupied a given field, state law is still preempted to the extent that it conflicts with federal law.

(3) Where state law obstructs accomplishment of the full purposes and objectives of congress.

See R. Black, "State Control Of Mining On Federal Land: Environmental Or Land Use Regulation?" *Natural Resources Journal*, Vol. 28, (Fall 1988), p. 876.

SECTION III

NEW TECHNOLOGY GENERATES A NEW GOLD RUSH AND NEW PROBLEMS

From 1980 to 1989 the annual rate of gold production in the world rose from 31 million ounces¹⁴⁴ to 69.5 million ounces¹⁴⁵, and is still increasing.¹⁴⁶

In the United States, the numbers have changed much more dramatically. In 1980, one million ounces were mined¹⁴⁷, in 1987, 5.4 million ounces,¹⁴⁸ and in 1989, 9.4 million ounces were mined.¹⁴⁹ The amount is still climbing.

¹⁴⁴Philip M. Hocker, *Cyanide Spring, Clementine*, Washington D.C., (Autumn 1989), 6.

¹⁴⁵See J. Lucas, *Gold*, Mineral Year Book, U.S. Department of the Interior, (1989), p 2.

¹⁴⁶It should be noted here that in some instances production numbers are understated or completely withheld to avoid disclosing a company's proprietary data. For example, of the fifteen states listed in the Minerals Year Book, U.S. Department of the Interior, Bureau of Mines, 1989, Table 2, p. 3 "Mine Production of Gold In the United States", ten states at one time or another, over a five year period, have withheld production numbers. Of these ten, five have consistently withheld these data for the five years listed in this table. This would underestimate total gold production in the U.S.

¹⁴⁷See Hocker, *supra* note 144 at 6.

¹⁴⁸See Lucas, *supra* note 145 at 2.

¹⁴⁹*Id.* at 2.

Nevada is the leading gold producing state in the United States, producing half of the total gold mined. Montana ranks fifth¹⁵⁰ in the nation. California, Colorado, Oregon, Utah, and Washington are also experiencing a mining boom. In 1992, about "10 million ounces will be recovered, considerably more than the 3.9 million ounces unearthed in 1852, the peak of the first great gold rush. It is a ten fold increase within the past decade."¹⁵¹

The incentive to mine gold is no different today than in the past. Profit and demand still drive the markets and new technologies make yesterday's protore today's ore.

In 1992, a relatively new technology (cyanide leaching) will extract more than 80 percent of the 10 million ounces of gold produced and about 15-20 percent of the 60.8 million ounces or more of silver produced in the United States. Since 1980, U.S production of gold using the cyanide leaching method has increased by over 900 percent.¹⁵²

In the 1970's, the price of gold went from approximately \$35 an ounce to upwards of \$400 an ounce. At this same time the Bureau of Mines was refining, an old process, the cyanide leaching technologies. Low capital investment and the fast "payout" of the leaching technologies have attracted many new operators, especially those with

¹⁵⁰Minarik and McCulloch, Montana. Minerals yearbook, U.S. Department of the Interior Bureau of Mines (1989) p. 3.

¹⁵¹ See K. Horan, "The New Gold Rush," U.S. & World Report, (Oct. 28, 1991), p. 45.

¹⁵²As of January 1990, there were 119 active cyanide operations on federal land in Nevada, California and Arizona, 113 on land managed by the Bureau of Land Management and 6 on land Forest Service.

See GAO/RCED-91-145 Cyanide Operations on Federal Land p. 2.

small or low-grade deposits.¹⁵³ Current leaching operations are producing gold from low grade ores containing as little as 0.03 oz per Ton, with the cut off grade occurring at 0.01 ounces of gold from a ton of ore.¹⁵⁴ The alternative, and generally more expensive¹⁵⁵, milling process requires ore grades to be an order of magnitude higher than the cyanide solution process. Silver can be leached as well, and requires ore grades at 1 to 4 ounces per ton.¹⁵⁶ Oxidized or weathered ores, where the gold or silver is uninhibited by encasement by other minerals, are the easiest ores to leach.

There are four types of leaching systems: heap, dump, vat, and insitu. This paper will concentrate on the "heap" method, primarily because it is the most popular. The heap-leaching method consists of spraying a sodium cyanide solution on crushed heaps of low grade ore piled on a pad. Sodium cyanide dissolves the metals in the ore through a series of complex chemical reactions.¹⁵⁷ The "pregnant"¹⁵⁸ solution is collected and treated to separate the metals.

¹⁵³See P. Chamberlain and M. Pojar, "Gold And Silver Leaching Practices In The United States", United States Department Of The Interior, Bureau Of Mines, Information Circular 8969, (March 1987), p. 1.

¹⁵⁴Id. at 5.

¹⁵⁵A typical open pit mine using cyanide leaching can produce an ounce of gold for under \$200. While standard milling methods cost approximately \$300 an ounce or more. "With gold prices hovering around \$338-400 an ounce the profitability of heap leaching speaks for itself."

See J. Robbins, "A New Kind of Mining Disaster," The New York Times: The Week in Review, Section 4, (Feb. 5 1989).

¹⁵⁶Chamberlain and Pojar, *supra* note 152 at 5.

¹⁵⁷Id. at 8. All current operations use sodium cyanide (NaCN), mixed with water at strengths of about one lb/ton of solution, or 0.05%. Solution strengths can range from 0.3 to 5.0 lb/ton. For free gold or silver, leaching occurs according to the following

A typical heap-leach operation consists of an ore source, such as a pit or old waste-rock dump; earth moving equipment to collect, transport and pile the ore on the heap leach pads and then remove the waste rock (spent ore) to another site; ore crushing machinery (optional); an impervious pad(s) to hold the heaps of ore being leached; preparation, storage and application of the "barren"¹⁵⁹ sodium cyanide solutions; collection, storage and recovery of metals from the pregnant solution; and a bolstering of the used sodium cyanide solution at the barren storage pond.

Cyanide heaps are eventually reclaimed by rinsing the process solution out of the heaps until the runoff water reaches a certain (low) level of cyanide concentration. When a pad is adequately rinsed, it is graded, covered with soil and then re-vegetated. The reclaimed pads are then monitored by the Department of State Lands to evaluate the success of the reclamation.

On paper, the process is simple enough, but in reality the potential for "disastrous" environmental impacts are present throughout the operation.¹⁶⁰ Inherent engineering problems plague cyanide heap-leach gold mining methods. Spills, leaks and overflows have occurred

reactions: $2\text{Au} + 4\text{NaCN} + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 2\text{NaAu}(\text{CN})_2 + \text{H}_2\text{O}_2 + 2\text{NaOH}$ and $4\text{Au} + 8\text{NaCN} + \text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{NaAu}(\text{CN})_2 + 4\text{NaOH}$.

¹⁵⁸"Pregnant" refers to the mixture of the sodium cyanide solution that has been applied to the ore and contains gold, silver and other metals in solution.

¹⁵⁹"Barren" refers to the un-used or replenished metal free solution of sodium cyanide.

¹⁶⁰See M. Stanton, T. Colbert, and R. Trenholme, "Environmental Handbook for Cyanide Leaching Projects", Energy, Mining and Minerals Division, National Park Service, United States Department of the Interior, (June 1986), p. 13.

and continue to occur at a number of mines in Montana. In 1984 the Golden Maple Mine's pregnant and barren ponds "overtopped", eventually contaminating Chippewa Creek and the domestic well and stock springs of a rancher less than a mile down gradient of the leaching operation.¹⁶¹

In August, 1990, there were 87 permitted mines, 196 active exploration licenses involving an estimated 700-750 individual mining projects, and 994 small miner exclusions¹⁶² in Montana. An estimated 25 million pounds of cyanide per-year¹⁶³ is being used by ten large mines and by four or five small miners in the state. The large mines include Beal Mountain, Zortman-Landusky, Basin Creek, Montana Tunnels, Mineral Hill, Golden Sunlight, Kendal Venture, and Chelsea's Spotted Horse Mine.¹⁶⁴

Leaks can occur from pads or ponds due to faulty design or poor construction. Puncturing and tearing of heap-leach pad liners may also occur during the loading or unloading phase of operation. Spills and overflows of the barren and pregnant solutions have occurred from heavy rains or snow-melt.¹⁶⁵ So far spills have killed fish, wildlife, and

¹⁶¹See S. Spano, "Case Histories of Cyanide Gold Extraction Projects in Montana and Current DSL Contingency Requirements," Hard Rock Bureau, Reclamation Division, Montana Department of State Lands, (1990), p. 1.

¹⁶²Operations that remove 36,500 tons of material per year or less and disturb five acres or less of surface

¹⁶³See *supra* note 108 at 47.

¹⁶⁴*Id.* at 47.

¹⁶⁵Spano *supra*, note 161 at 5.

livestock, but as of 1986 "no human deaths or illness have been attributed to cyanide in water supplies."¹⁶⁶

Over the last decade, with the significant increase in the use of the cyanide heap leach process for precious metal extraction, there have been a number of documented cyanide fluid losses in Montana and elsewhere. On March 9, 1990 Steve Pilcher, Director of Water Quality Bureau, stated at the Environmental Quality Council hearings on groundwater that:

The use of cyanide in ore processing probably poses the greatest single threat to the aquatic environment that we're dealing with today. It is something that has not been given proper recognition for the threat that it poses in the environment. Now our concerns are not limited to large operations or to small operations, because either large or small can cause problems.

Of the thirty facilities that are currently using cyanide to facilitate removal of gold and other precious metals-at least twenty of them have had documented fluid losses. And these range from the Viking Mine, a very small hole in the ground over by Elliston to [the two largest mines in the state] Zortman-Landusky and Golden Sunlight, all of these have had problems.¹⁶⁷

¹⁶⁶See supra note 160 at 13.

¹⁶⁷Steve Pilcher's Testimony from the Environmental Quality Council meeting on Heap Leach Gold Mining, March 9, 1990.

Pilcher's statement indicates a greater than 67 percent accident rate of leaks, spills, and overflows.¹⁶⁸ Cyanide at certain concentrations is a deadly poison.¹⁶⁹

In the same testimony before the EQC, Pilcher also went on to say that:

The larger operations in my mind pose a greater threat because of the size of the operation. But another thing that must be considered...the larger operations possess the technical expertise to deal with the problems when they crop up.¹⁷⁰

But while Mr. Pilcher states that: "the big mines have the technical expertise to deal with the problems", he doesn't indicate that they are also coming at compliance difficulties from another direction; by trying to redefine the rules of the game. According to a report by Hydrometrics, a consulting firm owned by ASARCO, a large mining corporation:

The question of whether an open pit is a point or non-point source of pollutants must be addressed since these pollutant sources are administratively handled in different manners. The Montana Non-degradation of Water Quality regulations...state that changes in surface water and groundwater quality from nonpoint source pollutants from lands where all reasonable land, soil and water management or conservation practice (best management

¹⁶⁸This rate is conservative because it does not account for possibility of more than one accident per mine.

¹⁶⁹The DSL and the DHES have stated that between two-thirds and three-fourths of the mines that have used cyanide in Montana have documented fluid losses. EQC report SJC 22, p. 47.

¹⁷⁰Pilcher, *supra* note 167.

practices) have been applied are not considered degradation.

This same report questions the designation of tailings ponds as point sources. Designating very large tailings ponds as non-point sources would mean that the big mines could alter water quality without having to file a nondegradation petition.

Given the dramatic rise in gold production, the large size of the new mines, what we know of the effects from past mining, the great potential for spills and leaks of mining solutions associated with heap-leach gold mining, the mining companies attempts to redefine their responsibilities with regards to water quality compliance, and the past performance of the regulatory agencies, there is considerable, and justifiably so, worry as to the consequences these activities will have on Montana's varying ecosystems, now and in the future.

SECTION IV

CITIZEN OVERSIGHT OF MINING REGULATION IN MONTANA

Along with a major influx of gold mines and gold exploration, two major silver discoveries located in the Cabinet Wilderness are nearing the end of the permitting process. The significant increase in mining activities in Montana, a brimming stock of abandoned mine sites, and the state government's faulty¹⁷¹ regulatory performance has citizen's environmental watchdog groups concerned with the state's ability to protect water quality and limit the environmental degradation associated with large scale mining development. In fact, environmental groups are so concerned that on the August 21, 1991, a letter signed by eight Montana conservation groups¹⁷² was presented to the Montana Department of Health and Environmental Sciences,

¹⁷¹See France, *supra* note 61.

¹⁷²These groups include the National Wildlife Federation, Northern Plains Resource Council, Montana Wilderness Association, Clark Fork Coalition, Cabinet Resource Group, Montana Environmental Information Center, Greater Yellowstone Coalition and Red Thunder Inc.

informing the agency that unless they demonstrate a major change in policy within 45 days, the groups would ask the United States Environmental Protection Agency to consider taking away the state's authority to enforce water quality law¹⁷³. "The groups specifically targeted the state's 'lax' monitoring and enforcement of hard-rock mines, which are allowed to dump untreated pollutants-including large amounts of heavy metals, arsenic, nitrates and cyanide-into groundwater that flows into rivers."¹⁷⁴ Practically all organizations and regulated industries involved with water quality issues have expressed concern that the level of staff allocated to ground water matters in the Department of Health and Environmental Sciences (DHES) is inadequate.¹⁷⁵ And on March 30, 1992, five environmental groups¹⁷⁶ filed a complaint and application for alternative writ of Mandamus¹⁷⁷ against Montana Department of State Lands (DSL), and Golden Sunlight

¹⁷³The State Department Health and Environmental Sciences, in 1990, received a letter from the EPA warning that the state could lose its enforcement authority for federal programs in Superfund and other toxic and hazardous waste cleanup unless the DHES increases its staff.

See: C. Kaufmann, "EQC Studying Key Environmental Issues", Down To Earth, Montana Environmental Information Center Vol. XVI Winter, (1990) p. 14.

¹⁷⁴See S. Devlin, "Groups Warn State to Enforce Water Quality", Missoulian, 22 (August 1991), p. 1.

¹⁷⁵EQC report SJR 22, p. 8.

¹⁷⁶National Wildlife Federation, Montana Environmental Information Center, Mineral Policy Center, Gallatin Wildlife Association, and Sierra Club.

¹⁷⁷A Writ of Mandamus is a written order issued by a Montana state district court requiring a public official to comply with provisions of state law. In this case the judge has provisionally ordered the DSL to immediately suspend the permit and prepare an EIS on the mine. Citizens can bring a mandamus to the courts to compel enforcement against agency officials whom they believe are not enforcing state laws. Anyone refusing to comply with a mandamus can be held in contempt of court and fined or imprisoned.

Mines, INC., forcing the DSL and Golden Sunlight Mines (GSM) to prepare an Environmental Impact Statement for the a newly approved mine expansion permit.¹⁷⁸ Originally District Judge Jeffrey Sherlock granted the writ of Mandamus, but it was subsequently overturned pending a new Judge's review of the case. In fact, mine expansions without "full blown" EISs have been a common concern and source of conflict. Other challenges have occurred relative to this issue.

The Zortman - Landusky Mine above the Fort Belnap Indian Reservation has had a similar history of mine expansions and cyanide solution losses as the Golden Sunlight Mine. These are two of the biggest gold mines in the state, both have grown from approximately 500 acres to 1200 acres plus over the years with only one EIS performed early on when the mines were one third the size they are now.

The Golden Sunlight suit also claims several violations of state law and the Montana Constitution, including:

- DSL violated MEPA by failing to prepare an EIS;¹⁷⁹

- DSL failed to follow its own regulations under MEPA in permitting the mine;

¹⁷⁸See France, *supra* note 61.

¹⁷⁹Other challenges to the State's mining policies of granting mine expansion permits without a "full blown" EIS have occurred as well. Red Thunder Inc., an organization "watch-dogging" the Zortman-Landusky heap-leach gold mine near the Fort Belnap Indian Reservation, has also challenged the DSL on this issue. The Zortman-Landusky Mine, the largest heap-leach gold mine in Montana, has expanded every year since it's "start up" and has grown from approximately 500 acres to 1200 acres without a new EIS.

-Golden Sunlight Mine's reclamation plan does not meet the minimum requirements of the Metal Mines Reclamation Act;

-DSL violated the Montana Constitution's requirements that "all lands disturbed by the taking of natural resources shall be reclaimed";

-DSL violated the Constitution's prohibition against "unreasonable depletion and degradation of natural resources" by allowing the permanent destruction and removal of the south end of the Bull Mountain Range, and;

-The Commissioner of State Lands ignored the expert opinions of the agency's technical staff in granting the permit and therefore his decision was arbitrary, capricious and unlawful.¹⁸⁰

Historically the Golden Sunlight Mine, located south of Helena near the Jefferson River, has had it's share of problems. In one accident, the mine lost 19 million gallons of cyanide solution into groundwater; cattle and migratory birds have been poisoned and; all reclamation attempts at the mine have failed. The mine, owned by Placer Dome Corp. of Vancouver, B.C., has had to buy out two families' homes, when the families brought a suit against the mine charging contamination of their drinking water. The settlement took place out of court, without the Placer Dome Corp. admitting any responsibility. A "gag order" applies so the terms of the agreement are legally unavailable. Ironically this same mine has been dubbed a "showcase operation."¹⁸¹

¹⁸⁰See J. Jensen, "Update On Colden Sunlight Mine Lawsuit," Down to Earth, Vol. XVIII, No.3, Montana Environmental Information Center, (Summer 1992), p.5.

¹⁸¹See T. Lacey, "Environmental Mining," Missoulian, (April 11, 1990), p. B3.

According to a January, 23, 1991 memorandum concerning the Golden Sunlight Mine, addressed to Hardrock Bureau chief Sandra Olsen, and signed by all the technical staff of the Department of State Lands and the Bureau of Land Management:

The environmental consequences and potential costs to the State of Montana for failed reclamation on these expansive, acidic dumps will be exponentially greater than if reasonable reclamation is required and conducted on the initial effort by Golden Sunlight. The historical mistakes of mining practices in our country are thoroughly recognized and understood; to knowingly allow the same practices to continue today is improper administration of the Metal Mines Reclamation Act and Rules, and demonstrates a lack of commitment to environmental protection through responsible resource development. If a reasonable disagreement truly exists, the department should err on the side of public policy and environmental protection.¹⁸²

As evidenced by this memo, concern exists, even within the ranks of the regulatory agencies involved in mine regulation and reclamation, that proper concern for the environmental effects of mining does not exist at the higher levels of government.

Stan Stephens, the Governor of the State of Montana, from 1988-1992, in one speech seemed to recognize the importance of responsible mineral development:

We expect you to act as responsible corporate citizens. The days of dominance of the Copper Kings and "The Company" are over, and the people of Montana will never let them

¹⁸²Jensen, *supra* note 180, at 5.

return...the mining industry must respond to public concerns about mining. Montanans have proven to be good neighbors and partners to the mining community when miners act responsibly. We expect and demand no less.¹⁸³

But in an article published by the *Missoulian*, on the 5th of October, 1991, Governor Stan Stephens seems to contradict his claim that the days of dominance by the mining industry are over. In a memo (the basis of the *Missoulian* article) to the commissioners of State Lands and directors of the Departments of Health and Environmental Sciences and Natural Resources and Conservation, concerning the Montanore Project near Libby in the southern end of the Cabinet Mountains Wilderness, the Governor stated: "As I have conveyed to you in the past, the final permitting of this project is imperative to the state of Montana."¹⁸⁴ The draft EIS for this project published last October by the Forest Service indicated this mine should have significant impacts on water quality, wildlife habitat and recreation.

Pressure at the federal level to influence resource extraction from our public lands exists as well. Recently, John Mumma, former Forest Service Regional Forester, and Lorraine Mintzmyer, Regional Director for the National Park Service indicated that politics rules their agencies, not science. On the subject of timber harvesting, John Mumma, indicated at a subcommittee hearing in Washington D.C. that Senators

¹⁸³Montana governor Stan Stephens, addressing the American Mining Congress, (September 1989); *supra* note 56 at 2.

¹⁸⁴See B. Lombardi, "Governor Accused of meddling", *Missoulian*, (October, 5, 1991), p B2.

Burns and Congressman Ron Marlenee, from Montana along with Senator Larry Craig, of Idaho, put political pressure on him "to cut more timber than was possible without violating environmental laws."¹⁸⁵ It seems the persuasive forces have also "trickled down" from the highest levels of government.

In 1988 Ronald Reagan issued Executive Order 12630, titled: "Governmental Actions and Interference With Constitutionally Protected Property Rights"; on this subject, Charles Fried, U.S. solicitor general from 1985 to 1989 wrote in his memoirs:

Attorney General Meese and his young advisors...had a specific, aggressive, and it seemed to me, quite radical project in mind: to use the takings clause of the Fifth Amendment as a severe brake upon federal and state regulation of business and property...if the government labored under so severe an obligation there would be, to say the least, much less regulation.¹⁸⁶

Reagan's Presidential order stated in effect, if "a proposed action involves a permitting process or any other decisionmaking process that will interfere with, or otherwise prohibit, the use of private property pending the completion of the process, the duration of the process shall be kept to the minimum necessary."¹⁸⁷ In a recent article for High

¹⁸⁵HCN Staff, "Two Say Politics Rule Their Agencies," High Country News, Vol. 23, No. 18, (October 7, 1991), pp. 1, 10.

¹⁸⁶Quote taken from Florence William's "Landowners turn the Fifth into sharp-pointed sword." High Country News (February 8, 1993), p. 11.

¹⁸⁷Locatable Minerals Recent Case Law Notebook, Minerals Administration course, (March, 1990), p. 2.

Country News, discussing the current flare up in "takings" cases, Florence Williams wrote that "environmentalists and some legal scholars said the cumbersome requirement [of Reagan's Presidential Order] gave landowners legal protection far beyond what the constitution grants."

Four centuries after Georgius Agricola described the effects of mining in his 1556 treatise, mining's environmental effects remain much the same but on a vastly greater scale.¹⁸⁸ Today the mines are larger, the machinery¹⁸⁹ can do in hours what took men and draft animals years to do and the metallurgy technology combined with the economics of gold has allowed gold mining operations to greatly increase its sphere of ecological influence .¹⁹⁰

Gold mining generates more waste than any other category of major minerals mined.¹⁹¹ The world's gold mining operations produce an estimated 620 million tons of waste per year; this number does not reflect the overburden removed to get at the ore.¹⁹² The largest mine in

¹⁸⁸ See J. Young, "Mining the Earth," Worldwatch Paper 109, Worldwatch Institute, (1992), p. 16.

¹⁸⁹ Trucks used in hard-rock mining in 1960 weighed 20-40 tons, in 1970, 80-200 tons. The size of the shovels used to move ore increased from 2.6-23.5 cubic yards during this same period. Id. at 23.

¹⁹⁰ Id. at 16.

¹⁹¹ Id. at 22. If you compare the total estimated amount of ore mined for copper and gold and the average percent grade of ore mined for these metals, you will find that gold mining generates more waste per volume of ore mined than for copper and the other major minerals mined. Sources for World Watch paper 109: U.S. Bureau of Mines, Mineral Commodity Summaries 1992, (Washington D.C.:1992), and grade estimates in Donald G. Rogich, Trends in Material Use: Implications for Sustainable Development," unpublished paper, Division of Mineral, U.S. Bureau of Mines, April 1992.

¹⁹² Id. at 23.

the United States, the Goldstrike mine in Nevada, moves 325,000 tons of rock a day.¹⁹³ Spills of cyanide solution have occurred practically everywhere the cyanide heap leach process is used. Mining of non-fuel minerals throughout the world displaces "at least 28 billion tons [of material]--about 1.7 times the estimated amount of sediment carried each year by the worlds rivers."¹⁹⁴ Hard-rock mines, mine waste disposal sites and areas of subsidence over underground mines directly disturb an estimated 1,235,500 million acres or 1,931 square miles of land every year; a land area equal to the state of Delaware.¹⁹⁵

¹⁹³Id. at 24.

¹⁹⁴Id. at 24.

¹⁹⁵Id. at 24.

The law locks up both man and woman
Who steals the goose from off the common
But lets the greater felon loose
Who steals the common from the goose

Medieval English quatrain

SECTION V

CONCLUSION AND RECOMMENDATIONS

The discovery of the New World by Europeans allowed for a culture closed by scarcity to socially expand, both politically and economically.¹⁹⁶ The land available for cultivation after the "Great Frontier" was opened up, multiplied five times while vast stands of timber stood as far as one could see; gold and silver was for the taking and vast amounts of other metals were available too.¹⁹⁷ It was the "existence of such ecological abundance" that allowed the "modern bourgeois views of political economy" to be popularized by the followers

¹⁹⁶See W. Ophuls, Ecology and the Politics of Scarcity, W.H. Freeman And Company, (1977), p. 77.

¹⁹⁷Id. at 79.

of John Locke. "At least where there is enough" John Locke said, and "as good left in common."¹⁹⁸ The assumption is that abundance or lack thereof is the limiting factor to economic growth and private property rights.

The mining of gold, as indicated earlier on in this paper, is expedited through the granting of a private property right as dictated by the Mining Law of 1872. Gold, right now, is valued at the tangible price of \$335-400 an ounce. The price could go up or down depending upon the dictates of the gold market. However, the market price does not indicate the environmental costs of unearthing this metal, nor does it pertain to the scarcity of the other resources it is found in association with. Water and wildlife, for the most part, are treated as property to do with as we see fit. But how do we value these resources with respect to gold and other commodities to reflect their scarcity? If gold is worth \$400 ounce then what is a gallon of rare, pure water worth? And if so many gallons of pure water are needed to produce an ounce of gold, then shouldn't that affect the value of gold? The problem, according to Julie Dalsolgio, an EPA official for Superfund in Montana, is that the mining companies don't have to account for the value of ecological damage up front - its not in the laws. If they were made to account for the value of a creek that may be fouled by mining waste or a flock of geese that may perish in a pond of cyanide solution during the planing process then they might comply. Give them a value for the water they use and

¹⁹⁸Hyman *supra* 53, at 220.

pollute, air they affect, wildlife, and habitat they destroy guided by clear and strongly enforced regulations with no double messages - you mess up this is what it's worth.¹⁹⁹ But this is not how things work in a world dominated by the "narrow, quantitative, market definition of economics."²⁰⁰

"With the white man and his sense of property and the rights of property came the inequities and paradoxes that eventually led to the need for the conservation movement."²⁰¹ Many areas in the United States have discovered that there is "not enough" nor "as good" left in common. Water resources throughout America have been severely impacted by our waste products. Even though many laws now exist to buffer us from the environmental costs of doing business and the political process has given us laws to control environmental degradation through prevention, preservation and rehabilitation, the ultimate question is are these laws working? "Yes" in some cases and to a certain degree, but "no" where mining is concerned. "No" will overshadow "yes" until mining is kicked out from beneath the sanctimonious umbrella of private property. Even though property is in effect a judicial invention, and judges often have broadened or narrowed property concepts when societal needs appeared to require readjustment, the process is too slow and cumbersome to efficiently

¹⁹⁹Personal communication with Julie Dalsoglio EPA official Helena, Montana.

²⁰⁰See T. Power, "The Economic Pursuit of Quality." Armonk, New York, M.E. Sharpe, Inc., (1988) p. 3.

²⁰¹J. McPhee, Encounters With The Archdruid, p. 65.

curtail the ecological damage sustained by mining.²⁰² If the National Environmental Policy Act has done anything, it has smoked out the inability of environmental laws to effectively pierce the shield of the General Mining Act of 1872. "NEPA, the innocuous procedural law, has been the catalyst for change by bringing those other public concerns into clearer focus."²⁰³

Congress in "coping with the consequences of ecological scarcity will require explicit...political decisions taken in the name of some conception of an ecological, if not a political and social, common interest."²⁰⁴ Instead what we are seeing are states who have passed stronger mining regulations, such as reclamation laws for hardrock mining, in fear of federal government preemption should they deny a mining permit. Theoretically federal law could preempt state laws should they come into conflict by limiting the scope of the 1872 Mining Law. State and Federal laws regulating mining should parallel each other with regards to limiting the substantiated ecological damage caused by mining. What we are seeing today is the "tragedy of the commons" where politics is enslaved, by degrees, according to the so called rational demands for economic growth and jobs. But development interests "almost always seems to identify rationality with

²⁰²See Coggins and Van Dyke, *supra* note 2 at 678.

²⁰³*Id.* at 678.

²⁰⁴ Ophuls *supra* note 196 at p. 80.

the protection of the financial interests of the business community" not the health or environmental interests of the community.²⁰⁵

It is true that the extent of private property rights in public minerals extraction has diminished. Further an ethical code of conduct, as to the development of this private property (mining) right has been legally established.²⁰⁶ Now the law requires a government agency to promulgate an EIS for a gold mining venture, which is ultimately seeking the private property right that goes along with mining. It should follow, then, that the courts have implicitly decided that the agency has discretion to grant, condition or withhold the federal [or state] approval sought by the private party.²⁰⁷ The denial of a mining permit in the State of Montana has never happened and probably will not happen until federal mining laws are rewritten. The federal regulatory agencies, and their state counter-parts should be granted, by law, the explicit authority to reject a permit should it be deemed that the environmental and even cultural damage will out weigh the economic benefits of extracting a mineral commodity.

The "right to mine" provision of the 1872 Mining Law makes balancing of mineral development with environmental protection of sensitive areas impossible. Yes, mining law has been changed through "a variety of mechanisms-piecemeal legislative reform, judicial

²⁰⁵Power *supra* note 197 at 5.

²⁰⁶Coggins and Van Dyke *supra* note 2 at 664.

²⁰⁷*Id.* at 664.

interpretation, and administrative implementation."²⁰⁸ But clearly there is no explicit statutory authority for land-use managers to approve, require modifications to, or deny permit applications for a mine.²⁰⁹ And this is where the crux of the problem lays. There is a dilemma here of horriffic proportions-if you take into account that mining generates twice as much solid waste annually as all other industries and cities in the nation.²¹⁰ Nationwide, at least forty superfund sites on the National Priorities Superfund list have been generated by past mining.

The need for institutional reform is widely recognized.²¹¹ Mining laws in the United States should be rewritten.

Laws change with evolving philosophies. In-alienable rights are flushed out with time; waiting for us to catch up to them as our ideologies mature. They are real regardless of whether they are recognized "now." Just because a court, like the Montana Supreme Court, fails to acknowledge realized or unrealized in-alienable rights does not suggest that they don't exist; they do. As in Leopold's example of Odysseus's "slave girls", it was just a function of time before proper moral sensibilities came into being. Gold has a very definite worth as a slave once did, and gold, like a slave, could be traded with regard to it's quality and purity. Right or wrong was never considered when trading

²⁰⁸Leshy, *supra* note 48 at 29.

²⁰⁹*Id.* at 4.

²¹⁰Mineral Policy Center fact sheet, Clementine, *The Journal of Responsible Mineral Development*, (Winter 1990), inside cover.

²¹¹W. Viessman, " Water Management Issues For The Nineties", *Water Resources Bulletin*, Vol. 26, No.6, Dec. (1990), p 887.

the slave; human suffering was not part of the calculus when disposing of one's legal property in the exertion of one's perceived right.

The American people, almost thirty years ago, realized the need to protect themselves and the environment from the wastes generated by the free enterprise system. The environmental laws passed by Congress during this time are a tangible representation of our concerns and needs as a society. Environmental, as well as, labor laws have changed the face of free enterprise for the betterment of all. But hardrock mining laws have slipped by virtually unscathed during the era of environmental mind expansion. Where mining law is concerned time seems to have stood still. Recently John Craighead wrote:

Congress and the American people have, in the past shown great vision and leadership in creating our National Parks, National Forests, Wildlife Refuges, and Wilderness Areas as a means of protecting and preserving the non-extractive values that translate into beauty, science, enjoyment, philosophy, lifestyle and for some religion. They are the heritage of all Americans. They are the property of the many and not of the few as is sometimes asserted by special-interest groups.

On the other hand the extractive resources of our public lands cannot be utilized and enjoyed by all citizens. They become the personal property of those few who have the power and resources to exploit them. Over time, those proprietary interests become accepted as vested in special interest groups, such as loggers and miners.²¹²

The power over proprietary interests in mining on public lands is ultimately vested in the people. Mining laws must be rewritten to

²¹²See J. Craighead, "The Wilderness Bill Hastily Drawn Up Should Be Dumped Quick" Missoulian Editorial, (June, 11, 1992), p. A5.

represent the concerns of the public. Mining on public lands should be contingent upon the preservation of the other values that exist in a mineralized region such as the water, the wildlife, the cultural significant of a place. As it stands the market value of gold or silver is the limiting factor to metal production - whether a mine goes or not. Hard rock mining is practically considered a blind right of passage; rewarded by a federally bequeathed private property right; protected by the fifth and fourteenth amendments of the United States Constitution.

After all is said and done the lopsided dominance of mining law over environmental law could easily be brought into balance by eliminating two powerful provisions of mining legislation: (1) the "right to mine" language of the 1872 Mining Act, and (2) the fee simple private property right granted to valid unpatented mining claims. Further new mining legislation should, directly, include clearer environmental criteria with explicit statutory and agency authority for land use managers to administer mining on public lands - to condition, or deny mining permits when required, as in the protection of sensitive lands. Other measures should include: a royalty based leasing system to allocate hard rock minerals;²¹³ true public involvement in the planning and enforcement process; standards for reclamation and bonding, and strong enforcement provisions, to make all of the above possible.

²¹³According to the Mineral Policy Center, adoption of a 12.5% based royalty system for hard rock mineral allocation would bring approximately \$500 million per year into the federal treasury.

Today, government agencies are virtually obliged, by law, to present themselves as mining advocates. While activists involved in the oversight of mining projects are compelled, by these same laws, to consider, I.F. Stone's maxim, "always assume Government is lying until proven otherwise."²¹⁴

²¹⁴As quoted from D. Zillman, and P. Gentiles, "NEPA's Evolution: The Decline of Substantive Review," *Environmental law*, Vol. 20:485, (1990), p. 521. Also see Schoenbaum *supra* note 73 at 176-177, and Justice William Douglas's dissenting opinion in *Sierra Club v. Morton*, *supra* note 124, and 125.

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